¶ The Safegard of Saylers, or great Rutter.

Containing the courſes, Diſtances, Soundings, Flouds and Ebbs, with the markes for the entring of ſundrie Harboroughs both *of England, France, Spaine, Ireland, Flanders, and the ſoundes of* Denmarke, *with other neceſſarie Rules of common Nauigation.*

Tranſlated out of Dutch into Engliſh, by *Robert Norman* Hydrographer.

And newly corrected and augmented by E. W. 1612.

UNIVERSITY LIBRARY CAMBRIDGE

Printed at London by *E. A.* for *John Tap* and are to be ſold at his Shop vnder S. *Magnus* Church. 1612.

516;06

To the right Honorable his singular good Lord, Charles Howard, Earle of Nottingham, Baron of Effingham, Lord high Admirall of England, Ireland, and the Principalitie of Wales: Knight of the most noble order of the Garter, and one of his Maiesties priuie Counsaile, &c. *R. Norman* wisheth increase of honour, in perfect felicitie.

THe learned (right Honorable and my verie good Lord) haue alwaies in their account and register of morall vertues, assigned a certaine prerogatiue of excellency in one more then in another, not for that they deemed the troupe of vertues (being in themselues simply considered) to surmount one another in singularitie, al being perfectly good, and mutually combined together, but in respect of some generall benefit and publique commoditie, accrewing & issuing from some one, more then from another. And in this respect haue they dignified and priuiledged Iustice with this honorable title, tearming her: The soueraigne Queene and chiefe Ladye and Mistresse of all vertues, because she not only is a vertue, in each degree perfect with the rest, but also for that (besides her other offices, partes, and effects) she is distributiue, yeelding vnto euery one that which in right is due thereunto: wherein she sheweth her selfe publiquely beneficiall to all Countries, States, and commonweales, wher she is had in price, reuerence, regard & honour,

and where ſhe is foſtred, vpholden, maintained & cheriſhed.

Which aſſertion being granted (as it cannot but be true) me thinks there is great reaſon offered & miniſtred to proſer Hydrographie or Nauigation before any other arte or ſcience, no ſo much for that it iumpeth in equailitie, and matcheth in ſingularitie any other whatſoeuer, in ſundrie ſubtill deuiſes and ingenious inuentions, with the vſe of many notable inſtruments, as Compaſſes, Aſtrolabes, Plats, Quadrants & many other appendances incident to the ſame, as cheefly for the great and publicke commoditie in generall, redounding (by the vſe & practiſe there of) to the whole bodie of the Common-wealth, and each particular member in the ſame.

The firſt inuention whereof, furthered with the artificiall aide of many a hidden, ſtrange, & almoſt ſupernaturall deuice ſince added to the ſame by the ſtudious trauailer & induſtrious Mechanician: he that would throughly conſider, ſhould find matter rather miraculous to wōder at, thē to be thought compaſſable with the reach of humaine braine or penetrable to the capacitie of a fraile ſilly worldling: yea hee may herein as it were in a mirour, behold & ſee the ineſtimable bountie and infinite goodnes of the Lord, who of an eſpeciall loue & purpoſed good will, which in his ſecret wiſdome he had determined for the mainteinance and relief of humaine ſociety, hath from aboue infuſed this ſo excellent a skil & knowledge into the minds of men, onely thereby to haue his wonderfull workes euerie where knowne, his praiſes reſounded, and his holy name from one generation to another glorified.

By this art we enioy by participation ſuch commodities as grow in other regions, and haue the ſame plentifully brought home to our doors by exchāge & entercourſe of ſuch wares as we (euē in ſuperfluous meaſure) poſſeſſe within our own coūtrie: by it we ſee & learne the cituation, natures, cuſtomes & dealings of other countries, by mutall trafficke, bartering with thē, & enter changeably giuing & taking by exchange one commoditie for another, wherby the need that one man

hath

hath of an other, more cleerely appeareth: and therby is ſocietie the more willingly embraced & brotherly frequented. By it many a poore commoner labouring about theſe commodities is relieued, and many houſhold from pine preſerued: by it the Mariner is maintained, whoſe ſeruice in al marine exploits ſtãdeth the prince in ſpecial ſteed. To be ſhort, by it is the Nauy Royal furniſhed, the Realme fortified, & the cõmon wealth inriched. Is it poſſible therfore that there can be any ſo vnnaturall to his countrie, or ſo iniurious to himſelfe, that without bluſhing face can ſay, he is not maintained, or at leaſt not greatly furthered (if not wholie and intirely, yet in great part & quantity) by Nauigation? Truely I thinke none. And if any ſhould bee ſo fond or vndiſcreet, his abſurd opinion would ſoone be diſcouered, and the inconueniences or rather miſchieſes wherein we ſhould bee ſo ſoone enwrapped, would quickly fall vpon vs, if God in his wrath & iuſtice for our vnthankfulnes ſhould ſtay the vſe therof, wherunto we are moſt humbly ſtill to beſeech him in mercie to graunt continuance.

Theſe ſo many, ſo neceſſary, & ſo profitable vſes of Nauigation, aduancing the honor of our countrie, and increaſing the wealth of the ſame, haue enforced mee in diſcharge of ſome part of my duty to my natiue ſoile & Region, & the rather becauſe of my profeſſion, to further the ſame with this ſmal work tranſlated out of Duch, containing the gatherings of diuers experimented men, neceſſary to be knowne and obſerued in our common Nauigation: as Tides, Depthes, Soundings, marks & Sandes, with the riſing of ſundry lands which by no Chart or Plat is expreſſed or knowne, but reſteth onely vpon the relation of the experimented Traueller.

All which being finiſhed, & according to my ſlender skill ended, I am the bolder (being therunto by duty boũd, to preſent vnto your honour as a pledge or token of my thankefull heart for the manifolde benefits and noble encouragementes which to my great comfort I haue continually found in your Lordſhip towards me, beſeeching your honor to accept & pro

teſt the ſame, as the poore labours of him, who in all points of loyall dutie acknowledgeth himſelfe your Honours moſt bounden ſuppliant and ſeruant. For although the worke bee intituled. *A Safe-gard for Saylers*, yet ſo ſmall is the force of a little paper in this our dainty age, that it is not able to defend or ſhift for it ſelfe, much leſſe to be a *ſafe-gard* to others, except your honor according to your accuſtomed goodnes & wonted generoſity, perſiſt and ſtill remaine as a Bulwarke both vnto it, and the *Marine Coates*, who continually pray for your Lordſhips daily increaſe of Honor in this life, and after your mortall race heere (heroyically run) a place among the eleſt of God in the heauenly Hierarchie.

Your Honours moſt humble ſeruant
Robert Norman.

To the friendly Readers, Sailers, and Mariners.

SEeing by the positiue and diuine lawe of God all men be generally bound any way they are able, to be profitable & helpfull to their Bretheren, Country and common wealth, for whose sakes as much as for their owne, they are borne and created: how can we but iudge verie hardly of their meanings and inuentions, who publish and commit to the view of the world, their trauailes and laboures to no other end but to reape thereby eyther priuate gaine or popular applause and commendation, as though indeede they were not thereunto by dutie bound, with their whole studdy, care, endeuour, & al the faculties of their mind whatsoeuer? From which sort of Ambitious persons, as my own conscience dooth cleerly exempt mee: so yet neuertheless, I feare that shall hardly escape the hard censures and criticall doome of many Linxes, whose glancing penetrancie and quick eie sight, being able (as the fable reporteth) to look through a stone wall, will (no doubt) be readie enough to encounter my honest meaning in simplicitie, and bee a great deale forwarder to finde faultes then able to amend faultes. Howsoeuer such seuere Stoicks shall daine to thinke of me, my owne conscience acquiteth me of all sinister pretence, & what peremptory sentence soeuer shall bee pronounced vpon me, I doubt not but the better moietie of the Marine sort (for whose vse this present worke is especially published) will accept in worth these my paines and trauailes.

Neyther need I to feare, (as I hope) any sinister construction at the hands of those, which with indifferencie, wil weigh my meaning, and without preiudicate opinions, consider my labours.

To the Reader:

For as the woorke is the obſeruations and collections of diuers and ſundry experimented Trauailers: So if they anywhere be found ſomewhat in matters of ſmal moment, to iar or a little to diſagree, conſider that the iudgements of ſundry men be & euer haue beene diuers and ſundrie. Beſides, there may ſome pettie faultes aſcape in the Dutch Coppie by often imprinting. But truely as neere as I could, I haue followed, yea and in many places by my owne obſeruation bettered the original. Which trauaile for thy behoofe, furtherance, and ſafety, in thy worthy and moſt excellent trade, I was the willinger to enterpriſe, and (as thou ſeeſt) accompliſh, beeauſe of the great commendation, praiſe and approbation, giuen thereunto by diuers skilfull men, expert in thoſe Coaſtes, whereunto this ſerueth. All which I haue done (Gentle reader) with intent to profit my Countriemen, in whome I wiſh increaſe of skill in all profitable Artes and Sciences.

Robert Norman

How to knowe all your Courſes, markes, and dangers, from London to *Barwicke.*

YOu ſhall come downe the riuer of Thames from London, till you come to the Eaſt ende of the Noꝛre, & there you may anker. And becauſe you ſhal know how to anker cléere of it, your markes bee Pickelwell Stéeple, ſhut in the high wood ẏ ſtandeth on the Noꝛth ſhoꝛe, by the water ſide, & ſo you ſhall anker cleere of the Eaſt end of the Noꝛre: alſo if you be bound fro the eaſt end of the Noꝛre, to the noꝛthward, your courſe lyeth from the ſaid place to the ſhow, noꝛtheaſt and ſouthweſt, and vppon the ſaid ſhow, there ſtandes a Beacon, and ſo take heede of the blacke taile that lyeth on the noꝛth ſide of that courſe, and come no neere it then 5. oꝛ 4. fatham, and take heede of the Hens egge ẏ lyeth on the eaſt ſide of that courſe, and come no neere it then 3. oꝛ 2. fatham: alſo take heede, come no neere the ſaid ſhow, then 12. oꝛ a 11. fatham. Alſo your courſe lyeth betweene the ſhowe and the ſpittes noꝛth noꝛtheaſt, and ſouth ſouthweſt, and ſo take heede of the red booꝛd that lyeth on the eaſt ſide of that courſe, and come no neere it then 3. oꝛ 2. fatham, and alſo of the white Aker that lyeth on the Weſt ſide of that courſe, and come no neere it then 6. oꝛ 5. Fatham, and ſo take hæde of your tide, foꝛ it ſets well ſouthw. vp among ẏ ſands, and ſo you ſhall haue in the faire way of that courſe 12. oꝛ 13. Fath. And when you come at the Spittes, looke well to your markes, foꝛ your thwart marks of the Spits is Woꝛdwell that ſtandes on the weſt ſide, and bring it ſhut vp in the wood that ſtandeth in the noꝛth end of it: alſo your length markes to S. Mowſes ſteeple ſhut in the channell end of the Abby, oꝛ els the two woods the one in the other, and ſo you ſhall

UNIVERSITY LIBRARY CAMBRIDGE

shall haue on the Spits at alowe water, two fatham and a halfe, and at nepe tides three fathams, at a high water foure fatham, and in spring tides at a high water 5. fatham vppon the said Spits, and so if ye bee bound into Coome water, goe your waies vp northwest, & so take you heede of the Dosel that lieth on the north side of the Channel, and come no neere it then 4. or 3 Fathams, and also the Knole that lyeth on the west side of that channel, and come no neere it then 3. fatham and so your length marks of that channel, are a high tree that standeth in the Ile of Marse, and bring it in the corner of the greene feelde three square like a triuet, and so when yee bee shut vp as far as the Ware head, goe your way north northwest or north, till yee come as high as Marse block-house and there you may anker, and there it floweth on your change day, south and by west, and north and by east: also if yee goe from the Spits to the northward, take heede to the Gonslit that lyeth on the east side of you, and come no neere him then 6. or 5. fatham, and so run your North till you haue brought the end of Naas in the high land on this side it, and so goe northeast til you come at the Naas and come no neere it then a Fatham and a halfe at lowe water, and so you shall haue 4. fatham at a high water: also if ye be bound from the Naas into Harwich water, your course lieth northwest or northwest and by west, and so take heede of the Pies that lyeth on the west side of that course, and come no neere them then two Fatham, and so take heede of the Pole head that lyeth on the east side entring into Harwich water, and come no neere it then 4 Fatham: Also take heede of the Aulter that lyeth on the west side of that channell, & come no neere it then 3. fath. and so run vp along by the Beech that lyeth on the east side of that channell. Also take heede of the Marres that lyeth on the west side of that Channell, and so you may runne vp till you come before Harwich Towne, and there you may anker, and there it floweth on your change day, south and by east and north and by west.

Also

Alſo, if yee bee bound from the Naas with Orford Naas, your courſe lyeth between them northeaſt & ſouthweſt and take heede of the Platters, and of the long land that lyeth on the ſouth ſide of that courſe, and ſo you may goe hard aboord of the Naas, and ſo runne yee no farther off than nine or eight fatham. Alſo your courſe lyeth betweene Orford and Leſtoffe roade, north and by eaſt, and ſouth and by weſt, and ſo take heede of the Home head, as you enter into Leſtoffe ſouth roade, alſo your courſe lyeth betweene Leſtoffe North rode and Yarmouth rode north and ſouth. Alſo if you bee bound ſouth of Yarmouth rode to the northward, take heede of the Frenchmans ſand that lyeth betweene you and the main: & your markes of that ſand are two high trees, brought in the midſt of the long houſe, ý ſtandes vpon the cliffes end. Alſo your thwart marke of it, is a lowe tilde houſe in the baley, and bring the eues of it in the edge of that land, and ſo you may beare within eight or nine fatham of it, and ſo you may goe with Winterton Naas, and come no nére the Naas then fiue or ſeauen Fatham, & ſo take heede of the Skirte Knecke that lyeth thwart of Hemelbicots, and it lyeth on the eaſt ſide of the Channell, and come no neere it then 7. or 8. fatham: Alſo your courſe lyeth betweene Winterton Naas, and Cromer North and by weſt, and ſouth and by eaſt, alſo your courſe lyeth betweene Orford Naas and Cromer a ſea boord of all the ſandes, north northeaſt, and ſouth ſouthweſt, and take heed of the Blunchbarrel that lieth in the faire way of that courſe: alſo take heede of the Limmer and Oze, that lyeth eaſt ſoutheaſt betweene Winterton Naas & Cromer, and lyeth alongſt the land to the water: alſo your courſe lieth betweene the Daggar and ſhield, and Burnam flats that lieth in the inner part of the well, weſt ſouthweſt, and Eaſte northeaſt: alſo your courſe lyeth betweene the Daggar and the ſhield and Laurenas, weſt northweſt, and eaſt ſoutheaſt: and ſo take heede of the inner part of the well bankes which is the vttermoſt part of Burnam flats.

And

And many other blinde ſands and dangers, alſo if yee be bound from Laurnas into Humber, take heede of the Bull that lyeth on the weſt ſouthweſt ſide of that channel, & come no neerer it then 12. or 11. Fathams. Alſo take heede of the Sunk that lyeth on the north northeaſt ſide of that Channel, and come no neerer it then 7. or 8. Fatham, and ſo ye may run into Grimple rode, or to the Whiteboth if yee pleaſe: and if ye goe from the White both to Hull, runne vp along by the weſt ſhore, till yee come againſt Scutter milles, which is thwart of Pauls, and giue it a little birth of the hauen, for there runneth a great tide in the midſt of that channell, and there is naughtie anker holde, and there it floweth on your change day, weſt and by ſouth, and to the weſtward.

Alſo, if you goe from Laurnas to Flamborow head, your courſe lyeth betweene them ſouth ſoutheaſt and north northweſt, & ſo take heede of the Smith ſand that lyeth thwart of betweene Burlington and Flamborow head, & if your winde hang weſterly that you cannot get about the head, take hæd how you anker in Flamborow rode, for there is foule ground and your markes that you haue to anker in cleere ground is the Windemill that ſtandeth on the lower parte of Flamborough head, and bring the ſaid Windmill in the midſt of the great ditch, and ſo you ſhall anker in cleere ground, alſo your courſe lyeth betweene the Dagger and Shield, and Flamborow head, Northeaſt and Southeaſt, alſo if yee bee bound about Flamborow head, looke that the tide ſet you not into the Sea, for it is but ill haling of the coaſt againe, alſo your courſe lyeth betweene Flamborow head, and Scarborowe, Northweſt and Southeaſt, and ſo take heede of Fillibridge that lyeth in the way, and giue a faire birth of the ſhore. Alſo your courſe lyeth betweene Flamborowe head and Huntley Foote, Northweſt and Southeaſt, and take heede of Whitbye Rocke, that lyeth in the fayre way of that courſe, and come no neere it then the windowes of the Abby cleere of the land: and alſo if yee bee put off with

Whitbye

Whitble hauen, take heed how you goe in, for there ſtands vpon the rocks of the ſouth ſide of that hauen a croſſe, and ſo you may goe in and leaue the croſſe on the ſouth ſide of you, and giue it a little birth of you, but your ſhips breadth, and ſo you ſhall goe cleere into the hauen, and there it floweth on your change day ſouthweſt to the weſtward, alſo your courſe lyeth betweene Huntly foot, and Tinmouth hauen, Weſt northweſt and eaſt ſoutheaſt, and if ye go into the hauen, take heed of your Beacons, which is 2. little white houſes, and the one ſtands vppon the Cliffe, and the other ſtandeth vpon the ſands beneath, and alſo bring them together one aboue the other, and ſo ſhall yee goe cleare into the Hauen: alſo if he be put beſide it by night, there is in one of them a light: alſo if your winde be ſcant that you muſt turne in, you may be bolde to borrow of the ſouthweſt ſide at 2. fatham and a halfe at three quarters flood, & at the northeaſt ſide at three fatham, and ſo it floweth on your change day vpon the Bar Southweſt and Northeaſt, alſo it floweth on your change day at Newcaſtle bridge, Weſt ſouthweſt, and eaſt northeaſt, alſo your courſe lieth betweene Tinmouth and holy Iland, north northweſt and ſouth ſoutheaſt, and ſo take heed of Cocket Iland that lieth in the mid way of that courſe, and if ye be put to anker in Scate roade, take heed, for there is foule ground, alſo there are markes to tell you to anker in cleare ground, that is the draw bridge of Banborow in the midſt of the Caſtle ditch, and ſo you ſhall haue good anker-hold in cleare ground, betweene holy Iland and it, if yee bee bound into holy Iland hauen, be ſure you take your marks with you, which is holy Iland Church, ſhut in the ſquare tower of the Abbey, and ſo you ſhall haue vpon the Bar, at a low water two fathams, alſo you may be bold to borrow of Bidetle ſide, and if ye be put out of Scate roade with Barwicke, betweene the Plow and the Cole ſtone, your courſe lieth north northeaſt and ſouth ſouthweſt, and if yee goe to Barwicke hauen, looke out for the croſſe that ſtandeth on

the

the northwest side vpon the rockes, and so you may goe in on the south side of the Crosse, till you come as high as Tweedmouth. Also your course lieth betweene the Ferne Ilands and Saint Tabs head in Scotland, north and by west and south and by east: also your course lieth betweene Scarborough & Saint Tabs head, north northeast and south southwest, and so ye shall goe cleere a seaboord of Ferne Iland, and when ye be past it, you may hale in with Saint Tabs as your wind will serue you, and there it floweth on your change day south and north: so fare you well.

¶ In commendation of the painefull Sea-men.

WHo so in surging Seas, his season will consume,
And meanes thereof to make his onely trade to liue:
That man must surely know the shifting Sunne and Moone,
For trying of his tides, how they doe take and giue.

So must he duely seeke the Eclipticke course of Sunne,
How he from West to East his proper course doth keepe:
His labour then (God knowes) as yet is but begunne,
For he must watch and ward, and shake off sluggish sleepe.

And haue a carefull eye, to hand that is at Helme,
For many one there is, that false his course will plie:
And swelling Seas likewise, the ship may ouer-whelme,
Or set her on the shore, without the Pilots eye.

When

When *Boreas* is abroad, and bluſtring blaſts doe blow,
In ſeaſon muſt he ſeeke to ſhort in lofty ſaile:
For that, if not in time he very well doth know,
That all too late indeed, no labour will preuaile.

But when the raging ſtormes doe ſwing the ſhip on hie,
Ofte times (againſt his will) he ſpoones before the ſeas:
Elſe in goes all the ſailes, and takes her from her trie,
In haſte to driue or hull, till God the ſame appeaſe.

Thus when he all the night, with weary toile hath tride,
And ſees the ſwelling ſeas hath ſet him from his way:
Then when a little ſlacke of calme he hath eſpide,
With ioyfull heart to take the height he doth aſſay.

His *Aſtrolabie* then he fetteth for the Sunne,
Or *Croſſe-ſtaffe* for the ſtarre called the *Ballaſtile*:
And thus with helpe of them and declination,
How land doth beare of him, he knowes within a while.

Then by his *Compaſſe* ſtraight he duly ſets his courſe,
And thus he brings the ſhip in ſafety to her Porte:
Where of his hazards paſt he makes a great diſcourſe,
And each man (by deſert) doth giue him good report.

If Pylots painefull toile be lifted then alofte,
For vſing of his Arte according to his kinde:
What fame is due to them that firſt this Arte out ſought,
And firſt inſtruction gaue to them that were but blinde?

FINIS. *R.N.*

A Table for the Tides.

Southampton Quinborow. Portesmouth.		Redban Aberden		Gravesend.		Dondy S. Andrewes		The age of the Moone.		London. Tinmouth. Hartlepoole.		Warwic		Erith. Leyth. Dunbar.		Falmou.	
South.		S. by W		S. S. W.		S. w. b S		☽		S. West.		s. w. b. w		w. S. w.		w. b. S.	
H.	M	H.	M	H.	M	H.	M	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.
12	48	1	33	2	18	3	31	1	16	3	48	4	23	5	18	5	3
1	36	2	21	3	6	3	51	2	17	4	36	5	21	6	6	6	51
2	24	3	9	3	54	4	30	3	18	5	24	6	9	6	54	7	39
3	12	3	57	4	42	5	27	4	19	6	12	6	57	7	42	8	27
4	0	4	45	5	30	6	15	5	20	7	0	7	45	8	30	9	15
4	48	5	33	6	18	7	3	6	21	7	48	8	33	9	18	10	3
5	36	6	21	7	9	7	51	7	22	8	33	9	21	10	6	10	51
6	24	7	9	7	57	8	39	8	23	9	24	10	9	10	54	11	39
7	12	7	57	8	42	9	27	9	24	10	12	10	57	11	42	12	27
8	8	8	4	9	36	10	15	10	25	11	0	11	45	12	30	1	15
8	48	9	33	10	18	11	3	11	26	11	48	12	33	1	18	2	3
9	36	10	21	11	6	11	51	12	27	12	36	1	21	2	6	3	51
10	24	11	9	11	54	12	39	13	28	1	24	2	9	2	54	3	39
11	12	11	57	12	42	1	27	14	29	2	12	2	56	3	42	4	27
12	0	12	45	1	30	2	14	15	30	3	0	3	45	4	30	5	15
North.		N. by E		N. N. E		N. e. b. n				N.		E. n. e. b. e.		E. N. E.		n. w. bw	

Foy. Lin Humber Weimot Dertmo Plimoth.		Bristol		Milford Bridge-Water.		Portland Peter Port.		The age of the Moone		Orkney Poole. Dowell.		I eepe Lux Lenoys.		Boleine. Dover. Harwic Yarmot.		Callice.	
East.		E. by S.		E.	S.	S. E. b E		☽		S. East.		s. e. b. s.		S. S. E.		S. by E.	
H.	M	H.	M	H.	M	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.
6	48	7	33	8	18	9	3	1	16	9	48	10	33	11	18	12	3
7	36	8	21	9	6	9	51	2	17	10	36	11	21	12	6	12	51
8	24	9	9	9	54	10	39	3	18	11	24	12	19	12	54	1	39
9	12	9	51	10	42	11	27	4	19	12	12	12	57	1	42	2	27
10	0	10	45	11	30	12	15	5	20	1	0	1	45	2	30	3	15
10	48	11	33	12	18	1	3	6	21	1	48	2	33	3	18	4	3
11	36	12	21	1	6	1	51	7	22	2	36	3	21	4	6	4	51
12	24	1	9	1	54	2	39	8	23	3	24	4	9	4	54	5	39
1	12	1	57	2	42	3	27	9	24	4	12	4	57	5	42	6	27
2	0	2	45	3	30	4	15	10	25	5	0	5	45	6	30	7	15
2	48	3	32	4	18	5	3	11	26	5	48	6	33	7	18	8	3
3	36	4	21	5	6	5	51	12	27	6	36	7	21	8	6	8	15
4	24	5	9	5	54	6	39	13	28	7	24	8	9	8	54	9	39
5	12	5	57	6	42	7	27	14	29	8	11	8	57	9	42	10	27
6	0	6	47	7	30	8	15	15	30	9	40	9	45	10	30	11	15
West.		n. w b w		w. N. w.		n. w. bw				N.	W.	n. w. b. n		N. N. w.		N. b. w.	

How to ſayle from Amſterdam going out to Sea.

FIrſte, When you ſhall Sayle from Amſterdam to Thyoorte keep you in the middle channell. And when you are without Thyoorte, then goe Northeaſt, ſo long till you haue brought Markerkerke with the lowe Land of Edam, and then keepe ſo, till that you haue brought Amſterdam a good way open to the northwards of the Chappel of Thyoort, and then keep your courſe Northeaſt and by eaſt, and Eaſt Northeaſt till you haue brought Edam by Eaſt Herken, & then you are paſt Pampus. Then goe northeaſt towards Vrke, and when you ſee Vrke beare northeaſt & by north from you, or more Northerlye, then are you in the right courſe. And hauing obſerued theſe pointes, you ſhall finde hard ground, & then againe ſoft ground, and a better depth, and then are you in the right Channel. But if Vrke beare northeaſt from you, then are you verie nigh to the north ſhore ſand. Then goe nowe and then more weſterlye, till you haue brought the Church and the houſes in one, & then goe weſt northweſt with the Poſt, and keepe the Church and the houſes in one, vntill you haue brought Wemelick a little without the land of the Wen, and keepe it ſo, till you haue brought the end of the Wen directly ouer Ankeuſon, keeping this courſe and the markes in one till you bring Grosbrecke and it together, they haue two ſharp ſteeples, and keep Wemelick open to the northwards of the Caſtle, as much as the breadth of the Caſtle or more. Theſe are the merkes of the Channel, you ſhall haue 4. fatham, and in the beſt 5. fath. 3. foote leſſe, and hard ſtreamy ground.

Item, to ſayle from the Poſt to the Creile, you muſt goe northweſt and by north. After as the winde and tyde will

UNIVERSITY LIBRARY CAMBRIDGE

ſerne, the markes of the Creile is Twiske church a little to the weſtward of the Corne mill, which is on the weſt ſide of Hemelicke and Pirnes a flat ſteeple which lyeth at the ſouth end of Cliffe, theſe brought together are the markes of Creile, and the Buyes lye in foure fatham, and in the beſt deepe is fiue fatham, The courſe from Creile to the plat is north and by eaſt, the markes are Panderga flat ſteeple ſtanding within the Land, and Buerthwiſen a Village in the midway betweene Worwolt and Panderga, (to wit) Buerthwiſen, and then next Panderga, and Pirnes is the third marke, & then by eaſt Stauerne you ſhall ſee a ſharpe ſteeple. Theſe are the markes of the plat, and doth lye in two fatham, and in the beſt deepe is but three fatham.

Item from the plat to the Tuffler, the courſe is North Northeaſt, the markes is a ſmall ſharpe ſteeple which ſtandeth at the corner of Panderga, Pirnes, Holquerum, Hemelinm, and the long Buerthwiſen: going by theſe marks you ſhall come to the Buy, which lyeth in two fatham at a lowe water, and betweene the plat and Tuffler dooth the ſhauld of the Blacke lye, a ſoutheaſt and a Northweſt mone deth make there a full ſea.

Item from the Tuffler to goe to the weſtwards of Worcom, you muſt goe north and by weſt, or more Weſterlye, vntill you haue two little Steeples northeaſt of you, and ſhut one in another, they ſtand vpon the Sea ſide, and when you haue brought them open one from another, then you ſhall ſee other two ſmall ſteeples ſomething to the Eaſtwards, then coge northwards ſomething offwardes keeping them open one from another, as farre as the other paſt which ſtand by the ſea ſide: Then haue you thwart marks for the Buye is a high houſe at the Eaſt ende of Bowdom, and commeth in at the South end of Hinde, And theſe are the markes of the Buy or Tunne that lyeth weſt from worcom, and lyeth ſcarce in three fatham. And the beſt depth is three fatham, and is ſoft ground.

Item, from by weſt Worcom, to Pegbelhecke, Northwards,

wards, the thwart markes is a long village by the Sea side. comming into a valley, and in the same vallie comes a small steeple. and against these markes the Buy or Tun of Pegelhocke lieth at three fatham and a halfe, the best deapth is foure Fatham soft ground. The West shore is very deep, the East land shore is flat or plattie.

Item, from Pegelhocke to the middle gront, the course is north, the land marks are two sharpe steeples, northeast from you: those twaine brought together, there lyeth the middle ground, on which is foure Fatham, the best deapth is fire fatham, and the west parte is verie deepe, and then go north northwest with Swanballick.

Item, the thwart markes, for the Buy of Swanballicke are Bolstwert, brought open a little by south Colmare by a little round house. These are the markes for the Buy which lyeth toward the East shore in three Fatham, you may sayle by them as ye come from within outwards, but as ye come outwards you may not sayle by the west shore.

Item, then from Swanballicke to Skutland, the course is northwest, untill you have brought Panderga to the north ward Polchwisen, which is a round village with a little flat Steeple, and is to the Southward of Pacom the nert to it, and keepe Panderga in the middest between the South end of Pacom, and that round village, then can you not go amisse. And when you have brought Panderga neer to Pacom, then are you nigh the north land, and if Panderga bee neere the round village, then are you nigh to the Southland, therefore keepe Panderga alwaies in the middle betweene that village and Pacom, as long as you can see them, till you come about Rashock.

Item, the marke of Skutland, is a flat Steeple which sheweth over the blockehouse of Harling, the Land markes is Blostwert, Northwards of the Stuntsen, which standeth on the Northwardes of Womens, that Buy lyeth in fire Fatham of the North shore, and is verie deepe, and in a maner shore deepe, & the best deapth there is seaven or eight

fatham. You may sayle by the south shore by your leade.

Item, the course from Scotland to Calshocke is west northwest, The markes of Calshocke are these, Fromiker with Harling, or verie nigh vnto the houses of the Towne of Harling, and vpon the north land lyeth the Buy at fiue fathams.

Item, the course from Calshocke to Woolsehook is north northwest, and you may bee bolde to sayle by the east shore: from Calshocke to Woolsehooke and the channel, is ten or twelue fatham deepe, and the west shore is there verie steep to the Castle.

Item, from Woolsehook to Schierinchalues, the course is North and by West, and the best depth is seauen or eight fathams, and then from Shierinchalles to Langersande, the course is northwest, there you may not sayle too neere the shore, as you come from within outwardes: these two Buyes (to wit) Woolsehook & Langersand, are no markes to make account of, but Woolsehooke lyeth also on the east side, at 4 fathams, and Langersand likewise lieth in the same side at fiue Fathams, and comming from without inwards, you may sayle along on the east side of Langersand by Schierinchalles: vpon the west side comming inwards, keepe you at seauen fathams, and you cannot doe amisse.

Item, from Langersand to the Castle, the course is north, the east side is shallowe and flat.

Item, the course from the Creile to the South Buye of Wyringen flats, is west northwest. And when you haue brought Twiske in the middest between the two Steeples which is Werooes, and Almerdorpe, then take heede you come nonerer to that flat with any ship that drawes much water, especially at a lowe water, and then set of northwest and by west. Heere a south east and northwest Moone makes a full sea. And when the Moone is east or west, then is it there full water, and best time to sayle ouer it.

Item, the markes of the souther Buye from the flat of Wyringen, is Twiske beyond Almerdorp, and the thwart

markes

markes is Cleuerth when it commeth by south the west end of the Church of Wyringen.

Item, from the south Buy, to the next Buy or Tunne by Scorne, the course is northwest and by north, & this Buye lyes of the west shore of three fatham, a quarter lelle. Then must you keepe by the east shore, that is the deeper side, the Marke is the Mill on the south end of the River.

Item, from Scorne to the North Buye, the course is North northwest, The east shore is flat, and the best of the Channell is three Fathams at lowe water, the West shore is the deepest, the thwart markes for the North Buye, are two Towers standing to the East wards by Wyringen brought in one, and the Buye lyes in three Fathams of the wester shore.

Item, from the North Buye to the Nese, keepe the North Buye with Pemelick, so farre as you can see, till you bring those two Steeples or Towers into one, and then shall you haue water enough. And then runne on north and by west, and keepe of from the Wester shore, for that is flat, and the easter shore is deeper. And in the right channel is seauen fatham deepe about the Buye. And markes of the Nese that is westward, is a steeple by Wyringen, brought a little way by West the vttermoste houses of Wyringen, and lyes towards the East shore in 6. fatham: You must then go more Westerlye with the west shore in fiue fatham, and keepe so till the Watermill come without the north end of the riuer, keeping so til you finde ten or twelue Fatham, then go west northwest to Vogelsand, and then you haue both the shores verie deepe. And when you come neere to Vogelsand, you shall see Coger church to the westward of the houses which stand by the west of the mill, then keepe Coger Church to the westwardes of the houses ỳ stand westward of the mil, so long till the high steeple come without the end of the houses, which stand to the northeast of that high Steeple, keeping them so a little without the houses, and so can you not miscarie on the south shore, keepe in fiue Fatham till you

come to the Roode, which is the Herne about Weringerdicke.

How to sayle to Amsterdam comming out of the Sea.

Item, from the Busse inwards to Hobsand, the course is south a little to the Eastwardes.

Item, the thwart markes from the Busse is the Cape vpon the corner of Schellinck, & the south end of the downes of Schellinck, and lyes in fiue Fatham on the easter shore, and in the deepest is nine or ten Fatham, and on the West side is deepe till you be past Hobland, and being past Hobsand, the fore floud sets you thwart ouer to the Buye. And you may goe that way, when you come from without inwards. Therefore you must keep your selfe in deepe water. And the fore Ebbe doth runne againe directly towardes the Fieland.

Item, the Markes of Hobsand is the easterliest sharpe Steeple vpon Schellinck, brought a little to the eastwards of the long house and the sand bankes of Fieland. Those brought a little within the white Leden, and thereupon the Buy, and lies in fiue Fatham by the east shore.

Item, from Hobsand to Langersand, the course is south and somewhat westerly, come no neerer to the east shore then seauen Fatham, and so you may not sayle fast by Langersand, for the Buy lyeth in fiue fatham of the East shore, and lyeth at the ende of Langersand, where you vse to turn into Getsing for to sayle to Harling. Then from Langersand to Schierinchalles, the course is southeast, come not in any lesse water then seauen fatham, and you may not come nere Schierinchalls: on the west shore thwart ouer against Schierinchalls you shall haue 10. or 11. fatham.

Item, from Schierinchalls to Woolfehooke, the course is South southeast, set your course alongst the west shore, and keep in fiue or seauen fatham. About Woolfehooke it is eight Fatham, and the eastermost Buy lyeth in foure fatham, ye may sayle hard by it when ye come out of the sea inwardes, there-

therefore keepe yee in deepe water.

Item, from Woolfehook to Raithook, the course is south-east and by south. Then you may keepe by the East shore in foure or fiue Fatham, till you come to Raithocke. In the maine Channell is eleuen or twelue fatham, the west side is a shore almost steep too. The after flood sets into the olde Wye, the markes of Raithocke is Franker, brought open to the Eastwardes of the towne of Harling, a little by the west hil, which is to the westwards of the Steeple of Harling. Heere doth the Buy lye in fiue Fatham.

Item, from Raithocke to Scutland the course is east southeast, vntill you haue brought the Beacon southeast of Raithocke, and thwart of you, and then within a while you shall haue holder water: the south shore is flat, but you may well sayle by it, the best deapth shall be fiue fatham or there abouts, and then you shal see Marcum beare southeast from you, which standes by the water side with a mill, and to the southward of Marcum doth lye a little round village with a flat steeple, and betweene this Village and the south end of Marcum, standes a flat Tower, and is called Panderga, keepe this Tower in the middle betweene the middle of this Village and the south ende of Marcum, and so you cannot take any hurt on either shore. And if Panderga bee nearer to Marcum, then are you by the north shore, and if Panderga bee next the Village, then are you by the Southland, therefore keepe Panderga in the middle, vntill you haue brought Winaldom ouer the highest of the Towne of Harling, and then you shall haue deepe water. Then haue you the Beacon of Moneballigh open the thwart marke of Scutland, which is Winaldom, with the blockehouse of Harling and Bulwert by North, the two Stengden lyes by north Mocustaem, and the Buye lyeth by the North shore in fiue Fatham, and it is steepe too.

Item, from Scutland to Swanbalch, the course is north-west and southeast: There you may not sayle neere the east shore, and yet with an after flood and a fresh gale of winde

at a ſtill water, you may came nere to the Eaſter ſhore. The flood runneth ſouthward, when the moone is S. or N. & the ebbe againe runneth northwards, ſo long as the Moone is E. or W. yet notwithſtanding, a ſouthweſt or northweſt M. makes a high water. And here the ſtreames ſets to the weſtwards & likewiſe vpon the flats. And about Swanebalch, you may keepe by the weſt ſhore, but take heede that you come not in leſſe depth then fiue fatham.

Item, the thwart markes from the Buye to Swanebalch, is Boſſwart brought ouer a little round houſe, which ſtands to the ſouthward of Curmor, and againſt that doeth lye the Buye on the eaſt ſide, & lies in three fatham water.

Item, from Swanebalch to the middle ground, ẏ courſe is ſouth ſoutheaſt and north northeaſt, keepe the Buys of the middle ground lying about Hinde to goe by, and ſo go ye well. And bet weene the two Buyes you may be boldeſt towards the weſt ſhore: and yet you may ſaile hard by the Eaſt ſhore: when you come from without inwards, you ſhall finde the Buye of the middle ground to lye in foure fathams, or thereabouts of the eaſt ſhore.

Item the markes of the middle ground, are two ſharpe ſteeples, and they lye north eaſt from you, the one is called Arom, and the other Peningen, theſe are the thwart marks, and you ſhall ſee likewiſe two flat ſteeples: by eaſt Yarling, which are called Minaldom and Middelom theſe twaine are the land markes, & theſe two Churches muſt be brought both in one.

Item from the middle ground to Pegbelhooke the courſe is ſouth, the Eaſt ſhore is flat, and the Weſt ſhore is ſteepe to, the thwart markes of Pegbelhook, is a village vpon the water ſide, to be brought in a Out or vallie, and directly vpon this Out or vallie, comes in ſight a ſmall Steeple: theſe are the markes of the Buye. And Pegbelhooke lyeth on the eaſt ſide at three fatham and a halfe.

Item, from Pegbelhoke to the weſt of Morkum, the courſe is ſouth, the eaſt ſhore is flat, and the Weſt ſhore

not

not so flat, in the Channell is soft ground: the thwart mark to the westwardes of Workum, you shall see a sharpe steeple lying farre within the land, to the northwards of Hindelopen, and when they come with the houses standing North Hindelopen, and thwart of Hindelopen, there lyeth the Buye in two fatham ½ at a lowe water, in the best depth is three fatham hard ground. Then west of Workum to the Tuffler, the course is south and by East Easterly: so long till the markes of Tuffler, that is Panderga a flat steeple to the southwards of Worwold within the land, and you shall see a little steeple come ouer Coze, of Panderga. These are the land markes of that Buye, the thwart marks are Pemellum, the country houses of Polquellum, and Pyrus flat steeple, keeping alongst these, you shall come to the Tuffler, which lies in two fatham ½

Item, from the Tuffler to the plat, your course is south southwest, according as the winde or streame dooth serue, betweene both these Buyes lyes the sholdes of the Blacke, and you must keepe Panderga in one with the Countrye houses and by south, so long till you haue brought Pyrus which is a flat steple to the Eastwards of Stauerre state, and these are the thwart markes of the Plat, & lyeth at two fatham ½. The land markes are the countrye houses standing scant halfe way betwixt Worwold and Panderga (to wit) the country houses next to Panderga, & these markes being in one, there you shall finde the Buye, which lyeth in three fatham.

Item from the Plat to Creile, the course is south and by West, and going so, you shall now and then haue deepe water, and so go till you haue brought Tuyer by west the Corne Mill, which stands by west Pemellicko. These are the land markes, and the thwart markes is Pyrus, a little flat steeple, which commeth in at the south end of the Cliffe: these marks being in one, there lyeth the Buye of the Creile in 4 fatham, the best depth is fiue fatham.

Item, from the Creile to the Vsoft, the course is south-east,

east, goe so vntil there appeare a sharp Steeple at the South ende of the Cliffe, and bring Groothoocke and that in one. These are thwart markes of the two Buyes, and then Pemelick Steeple brought by North the Castle, as far as the Castle is broad or more, that is likewise a thwart marke: the land markes is one end of the Wen, with the east church of Ankensen. The Creeple lyeth in three fatham large. And Hoork lyeth in foure Fatham toward the east shore, and the Creeple lyeth on the wester shore, the best depth is scarce 5. fatham and hard ground.

Item, from the Hoork to Wirk, the course is east southeast till you haue brought Medenblacke a little without ẏ land of the Wen, goeing so till you bring the Church of Wirke within the houses, & keep it so til you come neere vnto Wirke, and now & then edge to the southward, til the church of Wirke beare almost north northeast from you, and then goe southeast with Pampus. And when you are come so nigh vnto Pampus, that you can see Amsterdam with the Chappell of Myer, keeping your course so vntill Perkerkerke bee brought in the plaine land of Vidam, then keepe Perkerkerke so of you till you come vnto Tie, and keep you in the mid channell till you come to Amsterdam.

Item, now for to saple from Huysdwinen inwards, goe Northeast and by East, for the landes are steep to, on either side, and cannot well be sounded: Therfore keep your course so vntill the Church at the east end come to the East of the highest and moste easterly farme house, which stands to the westward of the Church: and doing thus, you can take no hurt by Burkland. Then go northeast so long til the highest spire steeple appeare without the houses which stand to the northeast of Nowberich, and keepe those Steeples still by north those houses, so long till you haue brought the church in the Cooch, which is without a steeple, and couered with blew slates, nigh vnto the mill which standes betwen Mosterend and the Quaell, and goe east southest, and keepe the Church and the Mill together as long as you can see them,

and

and then you shall see the water mill that standes on the other side of Wieringhen, wil come between the Douer and the other corne mill: keepe this course towards the West shore in fiue fatham, and at seauen fatham ye shall haue the Buye which is the best deapth.

Item, the markes of the Buye vpon the Nes is the westward steeple, brought a little without the moste westerly houses of Wieringhen, and doeth lie at fiue fatham on the East shore, & so you may direct your course. Therefore keep by the west shore, from the Nes Buye, to the North Buye, which lieth on the flattes, the course is south and by east & then when you haue brought two sharpe steeples ouer Wieringhen in one, then shall you haue 4. or 5. fath. there you must stay with Shippes of great draught to be lighted. The west shore is flat: the east shore is deepest, then going south and by east, within a while you shal haue sholder water, that is to say 3. fatham ½ lesse at lowe water. And when you come so neere that you can see the Buy thwart Memelicke, then you shal finde the norther Buy of the Macke: and the Buy lyeth in 2. fath. ½ at lowe water, and lyeth on the west shore, you must saple by the east side: the thwart marke of this Buy are two easterly steeples brought in one.

Item, from the norther Buy to the other Buy thwart of Sochorne, the course is south southeast: the markes is the Mill on the South end, and lyeth in two Fatham ½ against the middle of the west shore, you must saple by it east.

Item, from Sochorne to the south Buy, the course is south southeast, and lyeth in two fatham ½ betweene these 2. Buyes lieth the shallow of Mack. the thwart markes of the south Buy of the Macke, are 5 or 6. houses brought a little by south the moste westerlye Steeple of Wieringhen, and these houses are called Clenern, the land markes is a sharpe steeple by west Memelick, which you must bring ouer Almerdorp. Almerdorp hath a little flat Steeple.

Item, from the south Buye of the Macke to the Creille the course is east southeast, and to keepe the right Channel,

runne

runne southeast and by east, so long till you finde deepe water, or till you haue the land of Creile, that is Pyrus, at the south ende of Cliffe.

Item, when you come from by north inwards, and will sayle to Ankewsen, then bring that high red house to the west ward of the steeple, so that you may see between them, and keep so till the west end of it come right ouer that great high Farme house which standeth by north the Watermil, and these are the markes of the first Buye, then goe south southwest towards the westerhoze in two Fatham, & then of againe into two Fatham ½ the thwart marks of the other Buye is Boecaspell, brought ouer that Farme house, the land markes are to bring the Mill by south of Ankewsen, a little by East of that high stone house which stands at the south end, & against that doth lye the Buye, then kéep your course by the west shoze. Upon a flowing water you may saile fast by the East shoze comming inwards.

Item, the thwart markes of the third Buye is Grotebrooke, brought ouer the same farme house to the Northwards of the water Mil. The land markes of the same Buy is a stone house which standes at the north end opening from the Steeple, so as you may see betweene them: these are the land markes of the third Buye.

Item, to knowe the land markes of the Buy to the southwards of Ankewsen: next to Ankewsen the watch house by the gate being brought by East the Steeple: And by these markes when the Mill comes in on with the quire of Boecaspell, there shall you finde the Buy on the East shoze.

Item, the land markes of the moste southerlie Buy, is the little tower of the hospitall, being a little by west of a little steeple that stands vpon the tower that the ankers do hang vpon: the thwart markes is a sharpe steeple brought on the south end of Buerthwisen nigh vnto a high Farme house: with these markes lieth the southermoste Buye.

Item, now it is necessarie that al men should knowe that these creekes and streames before specified, are to be vnder-

stood

ſtoode for waters of pilotage, or lademanage: therefore by the Sea right it is plaine, that the Maſter of any Ship ſayling theſe ſtreames, and refuſing to take in a Pilot or lodeſman, and that thereby the Ship doth perish, and miſcarie, he is bound to make reſtitution to the Marchants for their goods.

Theſe following are the Seauen Ilands of Yotland.

Witholm, Ameren, Dil Rem, Menow, Fanow, Numink.

Of Bombergen.

Item, from Bombergen, to the Clue, the land lieth north-weſt, and ſouth-eaſt, and are diſtant 52. leagues. And a ſouth and north Moone makes a full Sea in all thoſe hauens. And likewiſe in Yotland.

Item Bombergen is a flat long Hill, & on the ſouth ende of it ſtandes a ſteeple, and to the north part of the ſame north-eaſt end, dooth likewiſe ſtand a ſteepe Hil or Tower, & from that are high round Sand hilles, as though it were ſalt houſes all alongſt euen to the Holmes: & the courſe from Bombergen to the holmes, is North northeaſt, and they are diſtant a 11. leagues.

Item, the tiſſe lyes alongſt betweene Bombergen and the holmes weſt or thereabouts in the ſeawards.

Item, in all hauens betweene Bombergen and the Clue and thereabouts, a ſouth or north Moone makes a full Sea.

Of Friezeland ſide.

Item, the Coaſt of Friezeland lies alongſt, Eaſt northeaſt and weſt ſouthweſt.

Item, the Elder and the Holy land, lie eaſt and by north, and weſt and by ſouth one from an other, and are diſtant two ſmall kenninge.

Item, Ripen, lyes from the holy land Northeaſt and by north, two great kennings a funder.

Item, the holy land and the Schelling lye northeaſt and by eaſt, and ſouth weſt and by weſt one from an other, and are diſtant 31. leagues.

Item, you may ſayle into the ſouth Hauens, at 5. fatham.

Item,

Item, you shall come no neere the Holy Lande on the westerside, then nine or tenne fatham to the Northwards. for from the Steene at some places it is seauen Fatham deepe

How to goe in with Holy land.

Item, to saple from the Holy land to the Elue, the course lies south and by east, and distant two kennings.

Item, he that will ride vnder the holye land, and comes from the west, let him not come any nearer by the west part then ten fatham, so long as you can see between the Monke and the high Cliffe, and then you may goe boldly with the south shore in foure fathams, by that side or fiue.

Item, when the Cliffe beareth southwest or west southwest of you: and the Coluerhooke lyes north northeast from you, there is the best Rode in foure or fiue Fatham water, faire white sand, and by Coluerhook is likewise faire ground to anker on.

Item, when the Werk lyes south east and by south from you, then are the markes in one.

Item, when as mensen lyes south from you, then are you open of the Weser.

Item, when the Cape of Roten lyes southeast and by East from you, then you shall see them also in one.

Item, when the Tower or steeple of Borkum dooth lye south from you, then are you open against the easter Emes.

Item, when you haue Juster tower northeast from you, then are you within the riuer of Juster.

Item,

Item, when the Beacons of Shermerinkecke lye to the eaſt ſoutheaſt of you, then you ſhall ſee them in one.

Item, from Roſe borkin to that Beacon in the Meme: the courſe is ſoutheaſt and by eaſt, goe by the Southland in ſeauen or eight fatham.

Item, from the Beacon on the (Meme) to the Buye on the eaſt ſide of the courſe is eaſt and by north.

Item from the Buy on the eaſt ſide, the courſe is Eaſt & by north. And holde the North ſhore till you come to the Stoor Tore.

Item when as you come from beweſt, and will ſaile into the Elue, then keepe the ſouth ſhore in fourteene fatham, and in Elue, you ſhall haue fifteene fatham, and is hard ground.

The courſe to goe into the Elue.

Item when you goe with the Elue, you muſt bring the Cape and the new Werke in one, which will bring you with the Buy, and the ſhore Buy lies on the South ſhore. Then from the ſhore Buy, to the Buy the Newgate, the courſe is Eaſt and by North: reckon alway your ſtreames, for the floodes ſets commonly Eaſt and by South inwards. Then runne towards the North ſhore in fiue or ſixe fatham, and ſo ſhall the Newgate come in with the firſt Buy or Tun, and when you haue the Werke ſouth at the firſt Buy, there ſhal you haue it foure fatham or therabouts: keepe that Buye on the ſteereboord and goe with the other Buy eaſt (in) and ſomething to the Northwards from that other Buye, the Werke lyes ſouthweſt, and in ſiue or ſixe fatham water: then forwards to the third Buye or Tunne: goe Eaſt Southeaſt, ſomewhat Southerly (in) And the Werke lyes from the third Buye South-

weſt

west and by south, there is deeper water seuen or eight Fatham fast by the Buy, then beare on to the fourth Buy east Southeast, and the Werke lies of it south west and by west, And that fourth Buy lyes on the highest of the new grounds and the new grounds are steepe to, and lyes dry at low water. Then when you come out of the Seas, you may goe in fiue or sixe fatham water by the foresaid second Buy, hence away to the Rose Beacon without any danger and keepe by the southland. Then keepe your course from the fourth tunne to the first, southeast, and the first tunne or Buy lies at the end of the new grounds: and when you haue brought the mill within the Lande, and Crw's Kirke in one, then are you past the new grounds. The Werke and the first Buy or Tunne, lye the one from the other west southwest something more southerly.

Item, when any ship comes from by west and will goe into the Elue, and hath a southerly winde, or a west southwest winde: let him beare aloft by the south shore in twelue Fatham, so long as he keepeth the south shore, for when hee comes right against the Elue, he must then keepe the south shore in seauen or eight Fatham, going so alongst the south shore till you haue brought the Werke south from you, or nie therabouts: and then goe more northerly til you come to the Buy of the new gate or entrie in. And from the fift Buy, goe southest and by south, till you come to the first Buy, and when you shall see a mill in a certaine blacke heath with a house: then hale in towards the land, and when you haue brought the mill to the eastwardes of that house, then are you within the Rose Buy, then goe east and by south to the Rose Beacon, and when you are against the Rose Beacon, then shall you see a little Church with a small sharpe Steeple within the land: when you haue brought the Church right ouer a long house, a Cable length to the Eastwardes of Retsebetell, then shall you bee hard by the Rose Beacon. Then goe Southeast and by east vp toward the Oeen, and keepe the south shore in seauen, eight, or nine fatham,

thank, so long, till there come to the westward of you a sharpe Steeple, brought in one with two other steeples, that stand in one Churchyard within the land, which is called Oldenbrooke, and when one of the steeples is come so far by the east, then you shall see a couple of trees: when you have brought the steeples into these two trees, then are you past the sholdes of Romerder, and then goe east with Buntsetell and keepe rather alongst the north shore at five or sixe Fatham, but take heede of the souther shore for feare of Pelgheremsand, for you shall saile alongst by it.

Item, if the weather so serue that you may, then keepe by the north shore still till you come at Billingborch, and when you are come to Billingborch, yet keepe you on the north shore still in seauen or eight Fatham, and hale so in till you come so farre as Rugeroort, then you shall come to the Easter shore, then you must hale up something more Southerly to Staderland.

Item there is the south Elue which now lately in Anno 1571. is bowed.

Item, from the Schore Buy, to the next Buy, your course is east and by South.

Item from the second Buye to the third, the course lyeth east southeast, and something more to the southwards.

Item from the third Buy to the fourth, the course is east and by south.

Item from the fourth Buy or Tonne to the fift, the course is east and by north.

Item from the fift Buye to the Buye in the Rose, the course is southeast.

Item from the Rose Buye to Rose Beacon, the course is southeast and something southerly.

The course to saile to the Weser.

Item he that comes from the westwards and will saile to the Weser, hauing a Northwest or a North Northwest winde, let him not come any neerer to Wangeroge then five fatham, and then let him runne east so long till he see the ve-

termoste Buye: and then there lies a sand on Larbourd, which is called the mid plat, on which is but two fatham at a full sea, and lyes open before the Weser, then from that Buy to the other course is northeast.

Item, if you should have the winde southerlie, then goe with Wangeroge, and keepe you in nine or ten Fatham, & take heede of the wester Weser that lies at 9. fath. inwards, then take your course ouer from Wangeroge Northeast till ye come at ten or eleuen Fatham, then shall ye haue Menser Church beare south and by east from you, there lies the vttermoste Buy.

Menser Church.

Item, Menser Church is a flat Church, without anye steeple, and lies in Vrowkens land: from the vttermost Buy to the second Buy, your course is east. And when you are a little from the second Buy, then lies Menser from you South and by east, & from that Buy to the third, your course is east. And when you are at the third Buy, then lies Menser south from you: from the third Buye to the fourth, your course is east, but see that you alwaies accompts your tide, and then lies Menser from you south and by West. Then from the fourth Buy to the Buy on the head, the course lies east and some what to the northwards. And when ye come to the Buy, then lies Menser south southwest from you, then goe Southeast and by south to the Buy in the Faire way that lies in 10. or 11. Fath. and take alwaies good heede of your streame. What Buy is laide for the Beacon, then southeast is the course to the Buy on the Coers.

Item, from the Buy vpon the Coers to the Buy on the Steene of the Bollenstil, the course lies southeast, and to the eastwards. And when you are about the Buy of Bollenstil then set your course to the southward, with the west shore: there are two Beacons standing.

Item,

Item, when you come nigh vnto the second Beacon, there is a good roade for a Westerly winde. And then haue you Langhwoorde.

Langhwoorde.

woord Church in Gotlland, and if you will goe further, then set your course southeast to the Buye or Tanne vpon the Blacke. And when you are within that Buye: then go with the west shore in three or foure fatham, and so you shall come now and then hard by ground land, vntill you come to Blexhemkerk. There be in the roade commonly such ships as are outwards bound, and doe tarrie for a winde.

Item, when Newarke lyes southeast and by south of you, then haue you both the Capes in one.

Blexhem Church.

Item, when you haue menser Church south from you, then are you open before the Weser.

Item, when the steeples of Borkum beare south from you, then are you open thwart of the easter emes.

Item, when the steeples beare nue northeast of you, then you are within both the Iuster Reuens, in the wester emes.

Item, when the head lands of Rotum doe lie southeast and by east from you, then are they in one.

Item, when the headlands lye south southeast from you, then they are both in one.

The going into the Iade.

Item, if you wil go into the Iade, when you are past the red sand, beare in southwards, euen as farre as you may,

and you shall leaue Menser Church on Steereboord side; and if you will sayle to the Wood, then leaue the Church on Larboord side.

Wangeroge

Item, you shall knowe Wangeroge by that there stands a little Church vpon it, and the steeple standes at the west end.

Item, Sprigeroge is to bee knowne by that it is plaine Sandhilles, and then you shall knowe Langeroge, for that it appeares in two Sandhilles.

Item, you shall knowe Walterom by that the west end is high Sandhilles, and the east ende lowe Sandheaps.

Iust

Item, you shall knowe Iust, two waies, there stands a Church ouer it, and the Seeple standes at the east end of the Church, and the mill that was in Iust is blowne down and is cleene gone, so that there standes nothing where the Mill was.

Burkum.

Item, you shall knowe Burkum, by that it riseth in three parts, and about the middest of the land standes a Church with a flat steeple, and standes at the east end of the Church,

Item, you shall vnderstand, that the Easter Emes goeth in betwixt Iust and Burkum.

Item, to know Burkum well, when you shall fall with it comming from by west, it seemeth to looke vpon as it were three Ilands: for betwixt euerie one of the hilles of it which seemes Ilands, is a Valley or flatte of plaine sand without

without anye hilles, and on that which seemes the middle-moste Iland, stands a Church with a great sharpe steeple, and stands at the west ende of the Church.

Item, from the northwest corner of Burckum, doth lye a rifle of sand, and lyeth west in the Sea, at least a league and a halfe, and you may sayle alongst by the same into the easter emes, and goe in east by south.

Item, the easter emes lyeth in east southeast, and when you haue Burckum Steeple south of you, then keepe by the shore, in foure Fathams and a halfe, and edge ouer, and fetch sounding of Iuster riffe, and you shall by and by haue deepe water, and then keepe in by him.

Item, when you haue brought Iuster steeple northeast of you, then are you past both the Riffes of Iuster, and then you are within the Easter emes.

Item, there is a newe Channell, that is when yee haue broken in the wester Emes, which lyes a little to the westwards of the old Channel, and is as deepe at a low water, as the old deepe is at a full sea or high water.

Item, when any man will seeke to enter in at the wester-Emes, let him bring the hulk south and by east of him, and the west end of Rotum southeast, and bring both the two great Capes in one, and then you shall finde the vttermoste Buy, and that lies in flue Fatham, then goe from the vttermoste Buy to the second Buye, East and by north, and that lies at foure Fatham, then from the second Buy to the third Buy, likewise east and by north, that lies in fire fath. And then is the longest Cape and the least Cape vpon the old deep to bee kept both in one, and so you shall haue euer the deeper water. Then from the third Buy to the farthest Buy, goe east southeast, and then edge something ouer towards Burckum riffe, towards the north shore, least yee fall to the eastwardes of Hakenballge, which goeth in by east Rotum. Also, when any man comming from by E. with an easterly winde, would goe in at the old deepe, let him bring the longest Cape, and the least Cape as they stand in one, a-

gainſt the olde deepe, and runne ſo in, and there you ſhal finde the third Buy, and the old gate or entrie at a low water hath but two fathams ½ being an eaſterly winde.

Item, Bolch is on the weſt end full of high Sand hilles, and there is no habitation vpon it.

Item, ye ſhall knowe Schirmerkerog by the lowe Sandhilles, and at the Weſt ende of it ſtands a high round ſandhill, and there ſtandes two Capes vpon it for to ſayle into Scholbalch, and you ſhall bring that Eaſt Southeaſt from you, and then you ſhall haue both Capes in one, & then runne right towards him till you finde the firſt Buye. And there lies two Buyes in one gate or entrie, and then when you come to the ſecond Buy, go eaſt northeaſt, and eaſt and by north, and you may ſaile by either of theſe Walles, and when you come at the third Buy, then go ſouth and by weſt or ſouth ſouthweſt, and you ſhall haue no leſſe at a low water then three Fatham. Now when you come out of the ſea and ſail with Borne rifke, then edge towards the Wall at fire Fatham, and at fiue fatham and a half. And do euen as heere before written, when you will ſayle into the Scholbalch.

Schurmonckeroghe

Item, to knowe Scirmonkerogh: thoſe are lowe ſandhilles: and at the weſt end ſtands a hill which is ſomething higher: as for the Church, you cannot ſee it till you come hard by the Land: and Schirmonkerogh is two leagues and a halfe in length.

Ameland

Item, vpon Ameland there ſtandes a high great Church with a flat ſteeple towards the weſt end of the Iland: and is couered with blew ſlates, and there is a ſtone houſe ſtanding by eaſt of the Church: and it ſeemes to looke vpon, as though it were an olde ruinous farme houſe: and there lyeth

three

three high sand hilles above the middest of the land, and Ameland is foure leagues in length.

Item, betweene Schirmonkeroogh and Ameland, goeth in Scholbalch, and hath two gates or entries, one goeth in by Ameland, and the other by Schirmonkeroogh.

Skelling.

Item, vpon the Skelling are fiue steeples, one standing at the east ende is sharpe, and about the middle of the land are three steeples: two flat ones, and the highest of all is sharp, and that which standeth on the west end is a high flat steple: and is called S. Brandarius Church: and the Iland is three leagues in length.

Item, a south east or northwest Moone makes a hie water in Rauker deepe.

Item, Huisduinen and the Mase: are distant 24. leagues.

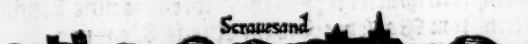
Item, Vetten be high ragged sand hilles.

Item, Kettle downe is a white forked sand hill.

Item, the Coast of Holland lies alongst south southwest and somewhat to the westwardes, and north, northeast somewhat to the Northwards.

Item, Marsedeepe and the Holden lie one from the other southwest and by south somewhat westerlye: and Northeast and by north somewhat easterlye: and are distant three and fiftie leagues.

Item, an east or west Moone makes hie water in Marsedeepe.



Item, the Mase and the Wellings are distant 3. kennings.

Item, the Wale, and the Warsdeep, are distant foure and twentie leagues.

The Wase.

Item, the Wale lyes by East Southeast, and somewhat Southerlye.

Item, the East Wainholt goeth in by Fiverboden, and then by the Waine land: a West south southwest Woone makes a full sea: also before the Wase mouth, and within the Wase, a south south west Woone makes a full sea.

Item, before the Flee: you must take heede to the tide, for the fore flood dooth set thwart ouer the shallow grounds to the Eastwardes, and the first of the ebbe sets likewise to the westwards.

The Flee Iland.

Item, the Flee is knowne by the high white sand hilles, and there standes a small steeple in the Church.

Item, the Flee and the Rifke, are distant the one from the other 11. great kennings, and Vlisand is foure leagues in length.

Item, there is an Iland that lieth between the Flee and the Texel, that is called Pereland, and there standes a little house vpon it: see that you take heede to your tides alwaies before the Texel, for the fore floud, and latter end of the Ebbe sets ouer to the Northwards, and the last of the floud and first of the ebbe sets to the southwards.

Item, Texell is two leagues ½ in length.

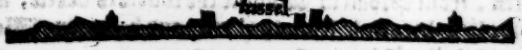
Item, from Warsedeepe to the Sweene is nine kenninge.

Item, from Warsedeepe to the Vlie, is 8. leagues.

Item, whosoeuer will saile out of Vlie to Shotland, the course is north Northwest, and somewhat westerlye, and so

sayle

saile with a foye winde, it is three dayes and a halfe sayling, and is 152. leagues.



Item, for to knowe Holland, Egmont is a flat steeple, and standes vpon the sea side, and within Egmont are two steeples standing together in one Churchyard.

Item, Fairehill and Shotland, lye by North Northwest and south southeast 130. leagues.

Item, Shotland and Bessannes lye North and to the eastwardes, and south and to the westwards, and are distant 46. leagues.

Item, Shotland and Orteny, lie southwest and Northeast 20. leagues, and when you are about midway between them, you may see them both at once in a cleere day.

Item, Orteny and Bossanus, lye south southeast and north northwest 26. leagues.

Item, the southwest end of Shotland and Fayre hill lye North Northeast and south southwest, two kennings distant.

Item, Fayrehill and Farie, lye Northwest and by west, and south east and by east, a great day and night sayling.

Item, Shotland and Barghen lye mere east, and west 60. leagues distant.

Item, Shotland and Farie lye west northwest, and east south east a day and a night sayling.

Item, Shotland and the Osterhooke of Iland, lye North West and by West, and southeast and by east, three dayes sayling.

Item, Farie and the Osterhooke of Iland, lye northwest and southeast two dayes sayling.

Item, from the Osterhooke of Iland to the Beare fort, the course is south southwest, and North Northeast twentie leagues.

Item, from the Beare fort to the Siden, is 16. Leagues, the course is West southwest, and East Northeast is the course

course to Midall, from Siden is all lowe plaine land, and within high.

Item, from Midall to Webnie the course is West, and Webnie lies three mile from the land: and betweene Webnie and Midall is 6. leagues.

Item, from Webnie to Robenes, the course is west north west: and east southeast, sixteene leagues: Robenes is a little blacke point: betwéen Webnie & Robenes is foure Hauens. And likewise there lies off Robenes west southwest, three Ilands: whereof twaine are two leagues and a halfe a peece, and the third is fiue leagues long.

Item, from Robenes to the Snens Jockle, the course is northwest and by north, and south east and by south, and are distant sixteene leagues. And betweene them are many Hauens, as Dorse Hauen & Busanden, Cabelwick, Merwicke, Walstruse, Strent, Hamfort, Hullin, and an Iland called Widowe halfe a mile from the land, an other also called Walfort.

Item, from Snens Jockle to the Bederstand, the course is south and north, end are distant sixteene leagues. And by the Jockelles lye three Hauens called Bodem, and the Stapen and the Riffe: and by Bosten Riffe dooth lie three Hauens, Kurmwork, and Grindfort, and an Iland called Sletten.

Item, from the Berderstant to the Schaghen, is 7. leag. and doe lie North and by East, and south and by west, and betweene them lye foure Riuers, and called in that tongue Foordes, The first is Patersfort, and then Telkfort, Admerfort, and in Admerfort are three Hauens.

Item, from the Schaghen to Disefort, is 8. long leagues, and they lie one from an other North Northeast, and south southwest: and between them are two Foordes, Orenderfoord and the Sugheford.

Item, Disefort, and Schalwicke lye Northeast and by North, & southwest and by south, & are distant foure leagues: in Disefort lye three hauens, Schutelfort, and Alfort, and the Iland Edoe.

The

The fords in Iſland; that is, the riuers or creekes going vp into the Land.

FIrſt, Swidens fort, Veeſt fort, Stort fort, Weiſe fort, the Wiſefort, Grunwick, Nerdfort, the Jockleſort, Rabben fort, Veſterbeche: and in that Hauen lie whale fiſh bones.

Item, from Schaelwick to the Yaddenſtrant, the courſe is north northeaſt, and ſouth ſouthweſt, and are diſtant 11. leagues. Heere lyeth thrée mountaines and yet is whole land.

Item, from the Yaddenſtrant to the Schagen Fort, is 16. leagues and lye North Northeaſt, and ſouth ſouthweſt: betweene theſe lye manie Fordes or Creekes going vp into the land. And firſt, the Stingrins Foord going into the landwards, Griens ford, and then the Bitter, and the Putiford, the Nide foord, and Widaell, and Waſedaell, the long Heere.

Item, from Schargenfort to the Widalen, the courſe is Eaſt ſoutheaſt, and Weſt Southweſt, and are diſtant fiue leagues.

Staghenfort is a Hauen, and is called Lapſand.

Item, from the Widalen to the Rauen hooke is twentie Leagues, and lies eaſt northeaſt, & weſt ſouthweſt: betwéne theſe twaine lies thrée Hauens, the firſt Sigelfort, and then Wackfort, then Huilwicke. And likewiſe thrée Fordes or Riuers: the firſt Yolefort, and then Oueſelfort, and then Lerefort, all which are Riuers or Creekes going vp into the Land.

Item, from the Romehooke to Grinſe, is eight leagues, and lies eaſt and weſt.

Item, Grinſe is an Iland, and lyeth from Huilwicke, 8. leagues ſouth ſoutheaſt, and north northweſt.

Item,

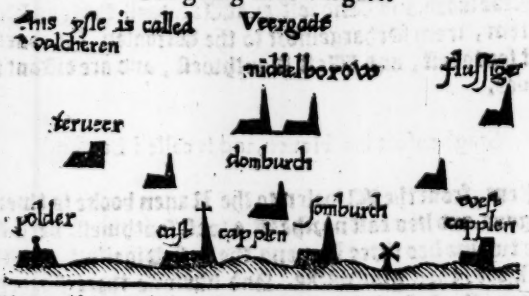
Item, Grinsle and Denfort lye south southwest southerly, and northeast northerlye.

Item, Grinsle and Sighelfort lye southwest southerlye, and northeast northerlye. And vnder Grinsle you may anker for a northeast winde in 17. fatham.

Item, from the Roem hooke to the Langnesse, the course is East southeast, and west northwest, and are distant sirteene leagues: betweene these twaine lies a sound and a Riuer, the sound is called Rwder sound, and the riuer is called Sescelfoert and lyes at the westwards of the Langnesse: and Ynwicke and Roodhauen lyes eight leagues from Langnesse, and they lye in a manner east and west.

Item, from Langnesse to Osterhooke, the course is south southeast, and North Northwest: and are distant foure and twentie leagues, and betweene them lyeth a Hauen called Wornefort, and to the East ward of the Langnesse there lies a great mountaine.

The going in at Vergate.



Item, if yee will goe in at Vergate, bring the steeple of Middelbrough and E. Cappien in one, or to the southeast southerly, and run directly so till you finde Shald water at three Fatham, and goe yee so forth ouer the Shald: then against Walland, you shall come into nine or tenne Fatham, then keepe on so vntill ye come where the Mermaide is set vp at Veruere, and till you haue brought those towers or steeples

which

which are called Valentines towers in one: then shall you be ouer against the saller Towers, and keepe those towers of Ternerre in one, and so runne euen hard to by them: and alwaies account of your tides: for a south or north Moon, here makes a full Sea. Now to knowe Markeren by the land, West Cappien is a grosse or a flat Steeple, and to the Eastwardes of West Cappien, standeth East Capien, and that is a sharpe Steeple. and to the North and by East of East Cappien standes Dombrough, and is likewise a sharp Steeple.

The Ordre to be obserued in comming

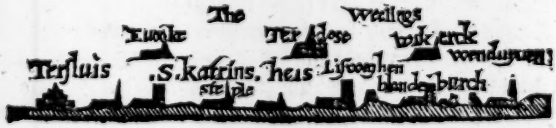
out at the Wellings.

ITem, to come out of the wellings, you must leaue one third part of the way on the Larbordside, so long as you haue the church by north the steeple of the abbey of Middleborough, or to your sight, vntill they be within halfe a fath. one of another, then you shall haue Eastmunster, as far from the Steeple of the abbay as the Coude Kerk stand by N.it, and when the Steeple of the Abbey standes so in the middest of those two Churches, then you shall haue to the Northwardes of Coude Kerke, another steeple, which is called Westmunster: and that standes to sight

ſight more then a ſhips length to the northwards of Conde Kerke, and when as the Steeple of the Abbey is brought in the middeſt betwixt both the two before named Churches, then you muſt runne directlye with them, keeping the ſteeple ſo vntill you haue brought Ardenburgh a great ſhips length without Heilant, and then you muſt keep Flanders ſide for feare of the Pooles of the Willing, and that you may be ſure of the other markes, Then you ſhall ſee Weindwins with a plaine, and the valley by it that ſeemes to bee two ſhips length, and then you ſhall ſee the ſmall ſteeples which are called Weindwins, open againſt the middle of the valley, and then the corner of the Steeple is the marke of the deapth of the water, for the nearer to the Poles, the deeper water, like as is the Heilegen before written: and when you ſee the Heilegen as it were two ſhips length a ſunder: there you may bring ſaint Lamberth by North the ſand hilles. Or when you are cleere paſt them, you may keep them halfe a fatham a ſunder in ſight, and hale ſo outwards a good while: and to come in at the Wellings from without, then keepe ſaint Lamberth as is aforeſaid, till you haue brought the Heilegen in one, then you muſt bring Saint Lamberth three or foure fatham open to the Northwards, and after gouerne your ſelfe by the marks of the ſteeples of the Abbey, as is before written. And if it be ſuch weather that you cannot ſee the ſteeples of the Abbey, then beare in Northeaſt vpon a flood, vntil you haue brought Arenburch and ſaint Lamberth in one, and then hale in directly eaſt northeaſt.

Item, before Wellings: a ſouthw. or a northeaſt Moone makes a full ſea, and at Walkhorne, a ſouth and a North Moone.

The going in at the Wellings.



Item,

Item, first you shall vnderstand that the Steeple of saint Katherins is a sharpe steeple, and is the Steeple that stands on the west side on the Sea Coast next to the Sluce. And from Saint Katherins vp within the Land stands another sharpe Steeple, and that is Knocke. And to the westward from saint Katherins by the sea side stands Heyes and hath a sharpe Steeple, and is something greater then Saint Katherins, and after that by the Sea side stands Lisweighen, whose Church hath a great flat Steeple. And from Lisweighen vp into the landwards stands an Abbey, which is called Terdoes, and that is a Church with a little sharpe Steeple in the middle. And from Lisweighen Westwards, stands Blankenburgh vppon the Sea side, and that is a Church with a flat steeple, but it is much lesse then the steeple at Lisweighen, and betweene Lisweighen and Blankenburgh vp into the landwards stands Wot Berke, and that hath a sharpe steeple and stands nigh vnto Blankenburgh, then by Lisweighen to the westward of Blankenburgh, there stands Weindwine, and that is a sharpe steeple.

Item, when the steeple of Lisweighen, and that of the Abbey of Terdoes are brought in one, then are you right against the vtter sand that lyes thwart of Pailand, and then are you within the English Pole, and if you haue fiue fatham of Pailand side, then lyes the Pole on the Larboord side of you: then keep ouer Pailland, in fiue or seauen Fatham, but no deeper, and runne in so long, till you haue brought the Steeple and saint Katherins, and the steeple of Knocke in one, those are called the Heileghen, and then are you cleane past the English Pole, and then beare inwards so long, till Saint Katherins Steeple comes in one with a high blacke hill, and then you are against the French Pole. And when the Steeple is hidden with the land that lyeth by North of the Sluis: then are you past the French Pole.

The

The markes and order to be kept when ye will saile in at Botkill.

Item when as you will saile in at the Botkill, having recouered the shore, you shall bring the Steeple of Middleborough southeast of you or thereabouts. And goe so in till you haue west Cappien east southeast from you, and then you shall see the Church of west Cappien come in a glade of the sandbankes, then keepe the Church so of you, so long till Saint Aetens comes past east Cappien, and then are you past the Shalds. Then runne inwards towards the shore to Flushing.

How you shall saile in at the Doerloe.

Item, when you pretend by Gods grace to saile in at the Doerloe, bring the high steeple of Middelborough to the northwards of the flat Steeple, and also a little from thence the two south towers almost together, the innermost as it were within the length of a Capstein barre from the vttermost, and run so into Flushing east and by south, or thereabouts is the course. And the Southbergben are two sharp steeples standing betwixt Middleborough and Flushing.

Item, East Cappien is a sharpe steeple: west Cappien and Saint Aetens are likewise sharpe steeples, That standes from it to the Eastwardes, and is much higher then East Cappien.

Selland.

Item, the land on Selland side lies alongs southwest and northeast, and a south southwest Mons makes a full Sea.

The Clocken deepe by Flanders side.

Item, when as you will goe in at the Clocken deepe, you must bring west Cappien in one with Saint Katherines church by Clocken, and so goe you in at the best deepe, and Saint Katherins steeple is the next steeple to the Sluis by the

the water side, and those other steeples standes vp into the landwards, and after that Heyes, and then Blanckenchurch that hath a flat steeple: after that, there stands three steeples to the westwards.

The Coast of Flaunders.

ITem, on Flaunders side, the Coast lyeth alongst East Northeast, and West southwest, & a south or north Moone makes a full sea at the shore. And without the sholds a southwest or northeast Moone: and alongst all the coast of Flaunders in the vttermoste Channell, it is not in any place about foure and twentie fatham deepe.

The Swine.

ITem, if you will goe in at the Swine to come in, the wind being contrarie, then take the latter end of the flood, and the first of the ebbe. And when you will saile in at Heyes deepe, you must bring the foure Beacons at Heyes which standes by the Mill in one, ouer Coze at Heyes: and then shall you goe in at the best deepe, and so you shall goe farre enough from the vtter sand: and so you may beare on to the Wielings east northeast. And you shall vnderstand, that Anchewisen, Wulfen and the Swine, doe keepe all one iust time of flowing and ebbing.

Item, when as Monkerke lies due south southeast from you, and that you can then but ken it vpon the hatches, then is there a flat of two fatham deepe at a lowe water.

¶ The order and course of the streames and tides alongst the Coastes of Flaunders, Normandy, and of Brittaine to the Seames.

ITem, first you shal vnderstand, that alongst all the coast of Flanders and of Sealand, the flood runneth to the eastwards, and the last quarter of the flood, the streames sets to the seawards, and the last quarter of the ebbe to the landwards. There are sand bankes, about which, as well at sometimes of the flood, as at sometimes of the ebbe, there goeth no streame at all.

UNIVERSITY LIBRARY CAMBRIDGE

If you come to an anker by east of the Nese in ten Fatham, you shall bee well defended for a west southwest winde.

Item, thwart of the head, the flood sets in Northeast and by north, and the ebbe sets out southwest and by south.

Whosoever will come to an ancker at lands end of England by Wouer, let him cast ancker and ride at 5. or 6. fatham, and he shall ride well for a south winde.

He that will come to Anker by the Galles, let him ride at fiue fatham, and saint Margets Church shall beare south southeast to him.

And whosoever will come to ancker within saint Margets, let him ride at fiue, seauen or eight fatham.

Note, that from Ostend to Saint Katherins, the Flood sets east northeast, and the ebbe west southwest.

Betweene Graueling and Dunkerke, the flood runnes Northeast and by North, and the ebbe sets southwest and by south.

From Wolterland to Graueling: the flood sets North northeast: and the ebbe, west southwest.

From the Nesse to Wolterland: the flood sets North and by east: and the ebbe, sets south and by west.

From Bullen to Blacknesse, the flood sets to the northwards, and the ebbe to the southwards.

From Staples, to Bullen, the flood sets north northeast and the ebbe southwest.

From Cane to Staples the flood sets northeast and by north, and the ebbe southwest and by south.

From Deepe to Cane, the flood runnes northeast and by north, and the ebbe southwest and by south.

From Fecam to Deepe in the faire way, the flood sets Northeast and by east, and the ebbe southwest and by west.

From Berefleete to Fecam, foure or fiue myles off the land in the faire way, the flood runnes east northeast, and

the

the ebbe sets west southwest.

From Berefleete to Sainehead, the flood runneth east south east: and the ebbe west northwest in the faire way: and you may not come any nearer then 12. fatham.

Item, from Berefleete into the Bay of Hags, the flood sets southeast and the ebbe west Northwest.

Item, from the Cape of the Hagge, to the Iland called Alderny: the flood sets northeast, and the ebbe southwest: and in the race of Blanchey it is so likewise.

Item, from the Caskets to Berefleete, the flood sets to the eastwardes, and the ebbe westward.

And betweene Britany Bay and the Caskets, the flood sets northeast and by north, and the ebbe southwest and by south.

Item, from Garnesay to the Caskets, the first quarter flood runneth East southeast, and then after northeast and the ebbe southwest.

Item, at Sekeiles as well within as without, the flood runneth East south east, and the ebbe west northwest.

Item, from the Ile of Bale to Aberwracke alongst the shore, the flood sets east and by south, and the ebbe West and by north.

Item, from the Fourne to Saint Powles de Lyons, or the Ile of Bale, the flood runnes east and by north, and the ebbe west and by south.

Item, from Saint Mathewes to the Fourne, the flood runes north and by east, and the ebbe south and by east.

Item, from the race of Fontenie to saint Mathewes, the flood sets North and by East, and the ebbe South and by west.

Item, nigh vnto Vshant North northeast off, is a place which is two and fiftie fatham deeps: and no ship can ride there, for the tide goeth round about as a whirle poole.

Item, from the Seames in the broade sand betweene that and Vshant, the flood runneth east northeast, and the ebbe west southwest.

Item, from Wolterland to Graueling, the coaſt alongſt lyes northeaſt and by eaſt.

Item, Wolterland lyes off of the before written Rockes northeaſt, and a little to the Eaſtwardes, and are diſtant 29. leagues.

Item, three Rocks which lie without the Cape of Caule, lyes northnortheaſt from Swine head, and are diſtant fiue leagues.

Item, Sainhead lyes from Wereſleete eaſt and by ſouth, and is diſtant 12. leagues.

Item, Wereſleete lyes from the Caſkets: eaſt and by ſouth, and are diſtant 16. leagues.

Item, the Caskets lies from the Fourne northeaſt, and a little to the Eaſtwards, and are diſtant three and fortie leagues.

Item, the Caskets lies from Saint Powle de Lyons northeaſt, and are diſtant 33. leagues.

Item, Garnſay lyes from Saint Powles Northeaſt, and a little to the eaſtwards, and are diſtant 25. leagues.

Item, set Iles lies from ſaint Powles eaſt northeaſt, and are diſtant 12. leagues.

Item, ſaint Powles lyes from Vlhant Eaſt and by north, and are diſtant 26. leagues.

Item, the race of Fontenie and the weſter Penmarke, lies northweſt and ſoutheaſt, and are diſtant 9. leagues.

Item, the courſe from Belliſle to Penmark is weſt northweſt, and ſo you ſhall goe cleare without the Pens, and it is from the weſter Penmarke, to the ſoutheaſt end of Belliſle 24. leagues.

Item, Belliſle lies from Vſe northweſt, and it is from the northweſt ende of Vſe, to the ſoutheaſt end of Belliſle 16. leagues.

Item, the courſe from the tayle of Aiſe to Vſe, is Weſt northweſt, and it is from the tayle of Aiſe to the northweſt end of Vſe 13. leagues.

Item, whoſoeuer will anker by the Caskets or Pagge-

let

let him go with the land, within three or foure cable length of the shore, for feare of the banke which lies out from the land in foure or fiue fatham, till you come at the Caskets, and then when yee come before the Village, then let fall your anker at fiue or sixe fatham: and the banke doe lie from Deine head southwest.

Item, if you will anker before Deepe, bring the Church and the gibbet in one, and then let your anker fall at 10. fath. at a full Sea, and a lowe water at 7. fatham.

Item, if you will anker in the Follis by Fream: you shall bring the mil and the fire Beacon in one, and keeping them soe, goe in well to the single, and Anker betweene the head of the Horderlies and Reihem. And a ship that drawe a fatham and a halfe water, must haue half flood or better: and you must leaue the Follim, for there you haue but a fatham and a halfe at a low water.

Item, whosoeuer will anker vnder the Nesse: hee must let fal his anker before Coudey at tenne or twelue fatham, and if you goe in any farther, you shall haue foule ground.

the Kaskets

Now you must note when as you haue the west end of the Caskets south from you, being foure leagues or there abouts off, there you shall haue it eight and thirtie or nine and thirtie fatham deepe, reddish and shelly ground, and likewise many white stones: and there betweene Caskets and Portland, you shall haue 40. fatham deepe.

Item, he that will goe to Garnsay, must sayle to the cape of Rokaine: that is the westermost parte of the Iland, and let him saile to the southwardes of that Cape three or foure Castle length. And then he shal go in alongst that souther side vntill ye see the Castle, and when ye haue the Castle thwart of you, then anker at fiue or sixe fatham.

Item, he that will anker before Sherbracke, let him cast anker before the Castle at five fatham, and he shall haue good road for a west northwest winde.

Item, without the west end of the foreland of Berefleet, lye rockes which are dyre at a lowe water, and lye a league from the shore, right before the great sandy Bay.

Item, he that will anker before the Hooke, let him kéep off a good way from the Headland, and then he shall sée two Churches westwards off from him, the one vpon the high land, and the other Church belowe. And when you haue brought those two Churches in one, then come to an anker at a lowe water at five fatham, and at a full sea, at nine or tenne fatham.

Item, S. Powles and Vshant, are distant 13. leagues, and lye the one from the other West southwest, and East northeast.

Item, he that will sayle to the Ile of Bale before Saint Poule de Lions, ye shall sée to the southwards a great rocke and you may hale in fast by the rocke: and when ye are right against the rocke, you may come to anker at three fatham at a lowe water, and at a full sea at seuen or eight fatham. And from the East corner of the Iland, there lyes a great rocke, which at halfe flood is vnder water.

Item, whosoeuer will sayle into Sherbracke, he must leaue the great rocke to the eastward of him, and runne in South southeast, and when you come in by an Iland, and the rocke is to seawards of you, then you shall kéepalongst by the shore of the East side. And when you haue sayled a while, then you shall sée a rocke that lyeth vnder water, and the sea breakes on it continually, and lyes in the midst of the entrye: and you may sayle on which side you will of

it.

it. And when you are a good way paſt the Rocke, then you may anker at foure or fiue fatham.

Item, north northweſt from Aberwracke a league into the ſea, lyes a bancke, which hath but fiue fatham on it at a lowe water.

Item, when you lie off and about the Mollens, then muſt you bring the Abbey of S. Mathewes, a little without the corner of Conket, but you may not bring it farre without.

Item, when you haue Vieman hill in the northweſt end of the foreſaid little Iland, then are you right againſt the ſouther Mollen, then keepe alongſt the eaſt ſhore, till you come to Blanckhauen.

Item, the Mollens are fiue little Ilands, which lye in a manner ſoutheaſt from Vlhant.

Item, hee that will ſayle from Blancke hauen Northwards, let him runne North Northweſt: and let him take heede of the North corner of the Blanck hauen, for feare of a great Rocke that lies before it, and then northweſt and by weſt of it lyes a rock vnder water, which lies not aboue three fatham and a halfe deepe at a lowe water, and is a very ſharp rocke.

Item, whoſoeuer will come to anker in Blancke-hauen, let him let fall his anker againſt the middleſte Way, at fifteene or ſixteene fatham.

Item, a little by ſouth of Conket, it is not aboue foure fatham and a halfe deepe at a lowe water in a ſpring tide.

Item, whoſoeuer will ſayle by weſt the Wintner, he muſt keepe the corner of Blanke hauen ouer the Blanken Mongie. And ſayling ſo, you ſhall finde foure fatham deepe at a lowe water and a ſpring tide. And when as you cannot ſee Conket from the North part: then are you by North the Wintner. And if you can ſee in at the hauen of Conket, then are you by ſouth the Wintner.

Item, hee that will anker before S. Mathewes corner in the beſt road: let him caſt anker at ſixteene or ſeauenteen fatham, and looke that the ſaid corner lye northweſt and by

noꝛth from you.

Item, Saint Mathewes point and the race of Fontenie, lie the one from an other noꝛth and by weſt and ſouth and by eaſt, and are diſtant 5. leagues.

Item, the coꝛner of Saint Mathewes, and the point of Croidon lye the one from the other eaſt ſouth eaſt, and weſt noꝛthweſt, and are diſtant 3. leagues.

Item, the Collier lies of Saint Mathewes point ſouth ſoutheaſt, and ſomething to the Eaſtwards 2. leagues.

Item, the Hen with her Chickens lyes by the Weſt coꝛner of Croidon, oꝛ Clers downe, and are couered at a high water.

Item, the Rock called the Nomelies in the mouth oꝛ entry of Breſt, and to the Southward of that about a quarter of a league lies a Rocke which is not diſe but at a ſpꝛing tide.

Item, the Falconers lie without Croidon a little to the ſouthward, and it is a great high Rocke: and you may ſayle within it if ye goe from Croidon to the race of Fontenie.

Item, weſt ſouthweſt from the Collier halfe a league off lies a rocke no deeper then foure fatham at a lowe water.

Item, when you are foꝛced to lie off and on, nigh about the Collie, and the weather is ſuch as you cannot ſee the Collier, then keepe the coꝛner of Rouchet without the coꝛner which lies from the noꝛthweſt end of Saint Mathewes Abbey: and then you cannot (in ſo doing) doe amiſſe.

Item, the thwart markes of them is Winkelboꝛow, and the Boꝛboꝛow, and when you haue bꝛought theſe twaine in one, then are you againſt the Collier: and when you can ſee the Colliers bꝛeake about the water, then you may if you will ſaile hard by it.

Item, when you are of Vſſhiant noꝛth and by Weſt, ſo farre

farre as you can well see the same from the Decke, then doth the East corner appeare the highest part of the Iland, and the corner is to the eastwards verie steepe downe, and then the land is plaine almost to the west point, and the west point something steepigg.

Item, when you are northwest and by North of Vshant then may you see through the point which is to the southwards of the maine Iland, and when you are off of Vshant Northwest and by West, then is that point shut in on the shore.

Item, when Vshant beares north Northwest from you, then doth it appeare like as it is heere aboue demonstrated.

Item, when you are off of Vshant northwest and by west, or west Northwest, then lies there a great Rocke of the northeast pointe, but you cannot well see through betwixt the Rocke and Vshant from thence. And alongst the northwest side of Vshant, it is all full of great flat Rockes, and lye all under water: and by the West end a little from the shore, lies a smal rocke as it were two little hillockes.

Item, when you are West and by North from Vshant, then there begins yet another rocke to appeare out at the north end, but you cannot yet see through betwixt the rock and Vshant.

Item, when you are due West of Vshant, then may you see two great rockes lying without the northwest corner of it: and you may also see through betwixt the corner and the rockes: and the lands seemes then to be all plaine aloft, seeming euerie place almoste like high.

Item, when you are south and by west from Vshant, so far off as you may well see it from the Hatches or Hull of the shippe, if ye then looke out of the top, you shall see the West northwest end all ragged with many rockes, and at

the

the east southeast end lyes a round rocke, and you may easily see betwixt the Rocke and Vshant. And then a little from that east southeast of you, you may see the Mollens which doe lie in two little Ilands, and there lyes yet other three Ilands towards the maine, but those you cannot see from hence, and they lie euerie one a good way off from an other, and there lyes many great Rockes about that Iland that lyeth next to Vshant and is full of Hillocks.

Item, a Bowe shoote from the point of Konket, lies the Wintner, and at a lowe water you may see it, it is a little flat round Rocke, and you may saile round about it.

Item, the course from the Fourne to Blanchie hauen, is East, and from the Fourne to Blanchsablon Bay, South southeast.

Item, when you will sayle from Saint Mathews point into Brest or Croidon, keep the southermoste Iland of the Mollens open to the Southwards of Blanck Mongie, and goe East Southeast in with Brest, and so you can take no hurt on the north side, for it is broade enough.

Item, the Mollins are fiue little Ilands, and the highest of them is that next to Vshant.

Item, on the shore at Fontnes head, a Southwest and a northeast Moone makes a full Sea.

The Keyser.

Item,

Item, the Seames lye off into the ſea, 3. leagues weſt northweſt.

Item, when you will anker in the race of Fonteny, you muſt anker at fourteene, or at fifteene fatham.

Item, when any man will paſſe the race of Fonteny, let him ſet his prowe to the North northeaſt, and let him take good hed of the Lauender, for the floud ſets directly towards it, and there is a ſonken rocke hard by. Alſo, hard by the Keyſer there lies a flat rocke, in the race on the eaſter ſide.

Item, if you come out of the ſea with Saint Mathews poynt through the broad ſound, you ſhall ſee a high land up in the land eaſtwards, with three hils as it were three heads, and the northermoſt is the higheſt, and halfe a league to the ſouthwards, there lies an other high hill, and is the higheſt above the high land.

The Sheet

Item, when the Sheet beareth north from you or thereabouts, ſo as you may ſee it out of the top, then it riſeth as here above is ſhewed: and the ground is ſmal white ſand, and many ſmall Wazes in it: and it is there ſeauen and fifty, eight and fifty, and nine and fifty fatham deep and you cannot from thence ſee the Seames out of the top.

Groy

Item, when you are three leagues from Groy, or thereabouts, then it ſheweth thus as is ſet forth: and Groy and Belliſle riſeth almoſt of one faſhion, and lye the one from the other North northweſt, and South ſouthealt and are diſtant ſeauen leagues: and vnder Groy is likewiſe very good riding.

Item, when Groy lies east northeast from you, then it sheweth as is heere aboue described.

Item, when Groy lies north and by west from you, then is sheweth as is heere aboue figured.

Item, when Groy lies Northeast from you, then dooth it shew as is aboue portraied.

Item, when Wellile beareth north northeast from you, then it sheweth like as is aboue portraied.

Item, the point of Saint Gindalf and Glanons at the entring of Penodet, lye the one from the other southeast and northwest, and are distant foure leagues. And for to eschew the danger of the Sholdes in this channell, let these markes following be well remembred, and you cannot doe amisse.

There is lying betweene Glanons and the Ile of Poton a ledge of Rockes, and to goe cleere of them, you must leave one third part of the way towards the Glanons, and the other two partes towards the Ile of Poton, and so you may sayle without feare.

Item, when any man will sayle into Penodet, hee must borough hard by the maine land, and the point of Glanons shall beare Southeast of him: then let him goe Northwest

till

till he come before the hauen, and there he may anker at foure fatham.

Item, whosoeuer will sayle out of Cantyer to goe through betweene the Ile of Moton and the Ledge, he must saile hard by Moton, so nie as a man may throwe a pound stone a shore, and then goe southwest and by south, and when you are come out with Glanons, then you may sayle boldely without danger to Penmarke: they lie the one from the other east southeast, and west northwest, and are distant 9. leagues.

Item, when you are West of Belille, from the northwest parte of it foure Leagues from the land, then dooth it shew thus as is heere portraied.

Item, from Belille to Use, the course is southeast and northwest, and are distant 16. leagues.

Item, when you will anker at the east end of Belille, bring your selfe a little to the westwards of the Mill: and anker in ten fatham, and ye shall ride well for a northwest winde and for a southwest and by west winde, and there is indifferent good ground, & great red gravell: and when you will ride on the Northeast side in Poldye Bay, anker at 11. or 12. fath. and then will the east point couer you for a southeast winde. And for a west Northwest winde, set ouer againe towards the sharpe steeple, and seeke no better deapth then twelue or thirteene Fatham: and hee that will, may ride in eight, ten or twelue fathams.

Item, he that will saile from the inner parte of Belille to Glanons, he must goe Northwest and by west, till hee come against the point of Glanons, which is called saint Gindast, because of Sholds that lye there betweene Glanons and Croy.

Item,

Item, when Vse beareth southwest and by south from you, about halfe a league off, then doth it rise thus as aboue is shewed.

Item, Vse is a league and a halfe in length.

Item, when Vse doth beare north northeast from you: then it shewes thus as is aboue figured.

Item, he that will anker vnder Vse, he must let fall his anker at seauen, eight or nine Fatham, for it is no deeper there, and you may not ride there at lesse then seauen Fatham, in the northeast side is the best Roade of Vse, but beware of a Rocke that lieth at the easter end as you come by it, for it is verie dangerous.

Item, the course from Vse to the tayle of Aise, is East southeast, and are distant 14 leagues.

Item, whosoeuer will saile from Vse to Piller, let him not come any nearer the maine land of Larmeller, then 12. fatham.

Item, Piller and Vse lye the one from the other North and by west, and south and by east, and are distant a great kenning, and in that course lie many sholds.

He that will saile from Piller towards the Baye, let him beware of the Hoskins ledge and let him goe east north east, for the Castle of Larmeller standes on the east side of the Abbey. And when you haue brought those two markes in one, then you must set thwart ouer to Pietermein. And from Pietermein you may verie well goe east Southeast, till you haue brought the Castle of Larmeller and a tree in one: then you may anker at 6. or 7. fatham where you list: it is soft ground.

Item, he that goeth without Beillle bound for the Bay, he

hee muſt goe eaſt ſoutheaſt with Piller, and it is diſtant from Bellile fourteene leagues. And then from Piller to the Penkens, the courſe is eaſt northeaſt: and are a league a ſunder, and from the Penkens to Pietermein, the courſe is due eaſt, a ſmall league off.

The markes to goe into the Bay.

Item, when you ſayle into the Bay, you ſhall ſee a little Church ſtanding vpon the high land, you muſt keepe that Church in one with the land of the Collets, and ſo you ſhall goe in at the belt of the Bay. And when you haue the hauen of Pzemdie open, then you are directly thwart of the ledge: when you are paſt that, then you may keepe alongſt by the ſhoze of Collet in foure fatham: and in the Bay, a northeaſt and by eaſt Moone makes a full ſea.

Hee that commeth to ride vnder Bellile beſoze Saint Powles, may ride at 13. oz 14. fatham, and if he will anchor beſoze Pegemaiſon, hee muſt ride at 21. oz 22. fatham.

And he that will ſaile in at the ſouth Portrees, let him goe alongſt by the ſouth ſhoze in 8. oz 9. fatham, and when he is come as farre as ſaint Maris, then ſhall hee keepe the towre of Rochell right ouer the Wood, which lies to the ſouthwarde of the other point of Rochell, and when the corner of the Wood beareth northeaſt of you, then he may ſet his courſe ſouthwards oz northwards without danger.

Item, hee that will ſayle by in the north Portrees, let him edge from the north ſide, for that is the ſholdeſt, and the ſouth ſhoze is ſomething deeper. And when you are againſt the Blockhouſe, then ſhall you haue 8. 9. oz 10. fatham, of the taile of Ayſe, they lie ſoutheaſt and northweſt, then keep neare to the north ſhoze, till you are thwart of the Wood, and the ſouth ſhoze from the Monaſtarie is flat, and when it is haile flond you may goe ouer with a ſhip that drawes twelue foote water.

Item,

Item, he that will ride thwart of the Wood, must let fal his anker at 7. or 8. fatham, and there is soft ground.

Item, the tayle of Ayle lyeth east southeast and west northwest.

Item, the south Pertries lies from Rochel, from the roade of Charle de Bloys, west southwest into the sea.

Item, you must have the tide to sayle from Rochell to the roade of saint Georges Iland: and then forth to Boyage, and your course from the Roade of Rochell to saint Georges Iland is south southeast, something more southerly, and they are distant two leagues.

S. martis yland

Item, when saint Martins Iland lyes northeast and by north from you: it seemes to you as it is heere above portrayed: and the land lies east southeast, and west northwest, and it is of length foure leagues.

Item, when you come in by the south Petris, then take good heede to the south shore of Oleron, for there lies out a great ledge of Rockes that breakes alwaies: and it lyes not far off from the Iland of Oleron: they are called the Dogs, and you may boldly beare alongst by saint Martins Iland in 6. 7. or 8. fatham.

Item, the Lauerden lyes a great league from the point of the Bosse, and in a spring tide at a lowe water it is drie and uncouered. And you may verie well saile through betweene saint Martins Iland, & the Lauerdin: for it is deepe enough, and then when you see the great tower at Rochell cleane without the Bosse, then are you cleare of the Lauerdin: and in the Bosse there is at a lowe water 5. fatham.

Item, a southwest or a Northeast Moone makes a full Sea there.

Item, when the white flat tower in Rochell (which is called Duke Charles tower) commeth to the southwardes

of

of the point of the burned Iland, then are you right against Bangert, and then you may boldely sayle into the Iland of Oleron.

The groundes and deapths of Brittaine.

MAlo, hee that is south southwest from the pole head of Burdiaux and in seauen and twenty fath. hee shall see sandhills to the southwards. And he that will saile from the pole head of Burdiaux to Rochel, e will come in at the so. Peretrées, let him not run any neerer the land, then thirteene or foureteene fatham.

Item, at the entring of the Peretrées, you shall haue 13. or 14. fatham: come no neeter the shore then that deapth.

Item, when you are west northwest from the south Peretrées, and about 5. great leagues from the shore: you shall haue foure and twentie fatham, and goodly red stony sand.

Item, if you be Southwest from the pole head of Burdiaux: and haue fortie and three fatham, and will goe with the Pole head, then goe Northeast, and you shall not sayle long, but you shall haue fortie three, and fortie fatham. And thereby you shal perceiue you be in the right course to the pole wards. And if you haue fiue and twentie fatham: then you shall see the tower of Cozdon: that lieth east and by south of the pole-head, and the same tower lieth East southeast of the wester Swach.

He that is betwixt Bellille and Vse in 74. Fatham, shall be from the land of Poitow about twentie and three leagues: and if then he saile towards the land thirteene leagues, he shall finde but 42. fatham.

He that is from saint Ellens southwest, and hath three and thirtie fatham: hee is about 9. leagues from the shore, and when he comes to 27. fatham, he shal see the land if it be cleare weather.

Item, to the west wards of Oleron when you are two kenninges

nings from the land: you shall haue 50. fatham, And west northwest in the Sea from Oleron, about eighteene leagues a ledge of Rocks which is called the Doper, and is not aboue three fatham vpon it at a low water.

He that commeth from Rochell outwards by the North Peretrees, let him keepe in 15. fatham, and he shall not need to feare the Barges of Oleron, for hard by the Barges you shall haue twelue Fatham. And hee that keepes this course alongst West Northwest, hee shall finde without Merthitye Fatham. And betweene Vse and Bellile in the faire way, or Northwest course, hee shall finde thirty fatham, and in the inner channel fiue and twentie fatham.

Item, without Vse, being within sight of the Steeple of the Church, you shall haue eight and fortie fatham: and 2. kennings from Vse: you shall haue fortie fatham.

Item, he that is southwest from Bellile, and hath seauentie two fatham, he is fifteene leagues from the Iland. And if he be southwest from the west end of Bellile, and haue seauentie fatham, he is then twelue leagues from the land, and if hee bee against the middle of the Iland in fiftie three fatham, he may see the Iland out of the shrouds.

Item, being southwest from the west point of Bellile: and as far off as you may in a cleare weather see land vpon the Hatches, you shall haue about fiftie Fatham, and the ground is like Mustard seede braied in a morter.

You shall haue the depth without thwart of Bellile, about fiue and fortie Fatham: come no neerer the land by night.

From Bellile to the Seames, come no neerer the Land by night then fiftie fatham.

He that sets forth from Bellile, and goeth west and by North, and keepes on till he come thwart of the Glanons, shall finde fiftie or fifty fatham, and there lie Rockes without Glanons in the faire way, and on both sides of them is about fortie Fatham.

He that is without Penmarke in fortie fiue Fatham, saying

saylyng from thence northwest, he shal double the Seames, and within the Seames he shal finde fiue and fifty fatham come no nearer by night for feare of the Bridge, for that Rocke lies a great way in the Sea, west southwest off.

From the Seames, two leagues and more into the Sea, lies a great ledge of Rockes, and between the Seames and Ledge is 50. Fatham, and there is when one part of the Ledge but 7. Fatham deepe, & 12. Fatham in some places.

Item, three leagues to the southwards from the race of Fontenis, you shal finde 64. fath. & the ground is something soft.

Item, betwixt the Seames, and Vshant is 56. Fatham, & hard by Vshant you shall haue 45. fatham. And also far in the sea you shall likewise haue the same deapth, and therefore it is perilous to truste to the deapth there.

Item, seauen leagues without Vshant, at the entring into the Slene, you shall finde 70. fatham, and betweene Vshant and Aberwracke, in the faire way is 40. fatham.

Item, in the course betweene Vshant and Sillie, which lye southeast and northwest, you shal finde 70 fatham.

The Colour of the ground in sundry soundings.

IN primis, he that soundes thwart of Glanons, shal finde small blacke sand.

And he that soundes against Penmarke, shall finde soft grauell like waye.

He that soundes against Fontenie head, shall haue redde sand mingled with blacke.

He that soundes betweene Vshant and the Seames, shal finde great redde sand, and some small red stones, and some blacke mingled withall.

And he that soundes being thwart of Vshant, shal finde small white sand mingled with white shelles, and certaine thinges like white Hackes teeth, and then he hath Vshant northeast from him. And if he finde all alongst in all things like needles, then Vshant beareth from him southeast.

And if he cannot well iudge by the groundes, let him then beare to the northwards: and if he finde deeper water, then he is in the holding of the Seames, & open the broad sound.

And if he be betweene Vshant and the Seames in 70. fatham: then you shall haue the ground small blacke stones with blacke sand. And if he finde the sounding to bee great red sand, then hee must stand to the northwards till he finde white sandy ground, with long small things like Hackes teeth, and then he shall knowe thereby that he is in the entring of the Sleue.

He that sets out from Siserge: must goe north northeast to goe without Vshant: and when you haue 10. fatham then he is 19. or 20. leagues from Vshant: and sayling on forwards, he shall haue 70 fatham, and then hee is a 11. or 12. leagues from Vshant: and if hee sound and finde small whole shels, and little stones like ware, then hee is thwart the Seames. And finding this ground, let him stand northwards, and if it bee on a flood, let him take heede of Vshant.

Item, if you bee betweene Vshant, and the Ile of Wasse, in 60. fatham, you shall finde in the sounding small stones as big as beanes, and thereby you may know that you are on Britaine side.

Item, if you be about the lands end of England, or about the Lesart in 70. fath. then you are from the land 17. or 18. leagues, and you shall finde in your sounding small blacke stones, mingled in great red sand.

And if you be in the same course at 60. fath. then are you 12. or 13. leagues from the shore, & there your ground shall be great red sand, and vnder it long small white things.

Item, if you finde the like deapth towardes the coast of Cornwall, you shal not see the land so soone as you think, for you shall haue that deapth vnder a long time.

Item by the Lyzard it is shore deeps 25. or 30. fatham & the land hard by.

Item southwest of Scilly, the ground is full of all sortes of little stones like the parings of Cheese, and white small

shelles

shelles mingled withall.

Item, to the southwards of Sillie, the ground is grosse sand.

Item, to the southwest of Sillie, the ground is red stones and fine white sand.

Item, 16. leagues south of Sillie, there is the ground like wise small red stones and white sand.

Item, in 37. and 65. fatham, the ground is shelles and whitish stones with sand.

Item, if you haue small blacke stones something long and mingled with blacke grosse sand, that sheweth the entring of the Sleue.

Soundings alongst the Coast of Brittaine.

ITem, if you bee on the Coast of Lyons betweene Vshant & Saint Powle de Lyons in fiftie Fatham, you are then within two leagues of the land, and take heede you come no neerer by night then fiftie fatham, for you shall see base white stone and the Rocke all a right.

Item, within a league of Aberwracke, you shall haue 50. fatham, and three leag. from the shore is there 56. fatham.

Item, if you bee thwart of Set Iles Northeast off ten leagues, you shall haue 52. Fatham.

Item, if you saile southwest from the Caskets 13. or 14. leagues past Garnesay, and from thence to Set Iles in the Drech course, is 35. and 40. fatham.

Item, if on the day you lye off and on betweene Aberwrach and the Fourne, come no neerer the Rockes then 35. or 40 fatham, and take good heed in the night.

Item, if you lye off and on in the day time betweene the Ile of Base and Lanterger, you may come within 25. fatham of the maine without danger.

Item, he that comes with Dragnesse West southwest from Set Iles, let him come no neerer by night then 40. Fatham.

The course to be kept in sayling from the tayle of Aise.

THe course from the Billiats or taile of Aise, to Use is west northwest, & from the taile of Aise to the northwest end of Use is 14. leagues.

Item, Bellille and Bluet lyes from Use northwest, and it is from the Northwest end of Use to the southeast end of Bellille, 16. leagues.

The course from Bellille to the wester Penmarke, is West Northwest: and so you shall goe cleare enough off the Pennes, and from the wester Penmarke to the southeast end of Bellille, is 19. leagues.

Fontenie or the Rase, lies from the wester Penmarke, northwest, and are distant 8. leagues.

Saint Powles de Lyons lyeth from Vshant east and by north, and are distant 16. leagues.

Set Ile lyes from saint Powles, East Northeast, and is distant 12. leagues.

Garnesey lies from saint Powles northeast, and a little to the Eastwards, and are distant 20. leagues.

The Caskets lies from saint Powles northeast, and are distant 28 leagues.

the Caskets lie from the Fourne northeast and a little to the eastwards, and are distant 45 leagues.

Bereflecte lyes from the Caskets east and by south, and is distant 16 Leagues.

Seine head lies from Bereflecte east and by north, and is distant 21. leagues.

Item, the Rockes which doe lie without the Cape of Cause, lye north northeast of Seine head, about 5. leagues.

Blackness lyes from the said Rockes of Cause northeast and a little to the eastwards: and is distant 30. leagues.

From Blackness to Craueling, the land lyeth alongst northeast and by east.

And all the Coast of Flaunders lyeth east northeast and west southwest.

The

The lying of the Headlands of the Coasts of Portingall and Spaine.

IN primis the point of Farao or Cape saint Mary, lies from the Rockes of Chipiona, which lie at the east point of the entring of the River of Siuill, east and West, distant 28. leagues.

The Cape saint Vincent lyeth from the Cape of Saint Maries. West and a little to the northwards, and are distant 18. leagues.

Cape Picher lyes from the Cape of saint Vincent, North and to the westwards distant 33. leagues.

The Cape of Rockesemper, lies from cape Picher northwest and by north, and is distant 8. leagues.

The Burlings from Rockesemper lye north northwest and are distant 13. leagues.

Cape Finister lyeth from the Burlings due North: and are distant 68. leagues.

The entring into Bayon lyes from Burlings, north and by east 55. leagues.

The Iland of Bayon lye from Cape Finister southeast and by south distant 16. leagues.

The entring into the Pooles, lyes from Cape Finister southeast, and is distant 5. leagues.

The Cape of Corian lyes from Cape Finister due north, and is distant two leagues.

Siserge lyes from Cape Corian Northeast and by east, and is distant 10. leagues.

The Cape Pyer lyes from Siserge East northeast, and they are distant 7. leagues.

The Hauen of Ferroe lyes from Siserge due East, distant 7. leagues.

Portingal, lyes from Cape Pyer, Northeast and by East and is distant 8. leagues.

Portingall, Mars point, Cape Penuie, and Martinchaco, in Biskaie, lyes one from another east and west, and are

a funder 66. leagues.

The Iland of Saint Cyprian lyes distant from Otingall 7. leagues.

The entring into Rebadew, lyes from the Iland Saint Cipzian southeast, and they are distant 8. leagues.

The Rockes of Cappenye lye from the entring of Rebadew northeast and by east, distant 14. leagues.

Martinchaco lies from the Rocks of Cape Penie east, and is distant 43. leagues.

The point of Pewger lies from Martinchaco east and by south, and are distant 14. leagues.

The point of Bayone lies from the Pewgar northeast and are distant fiue leagues.

Arkason lyes from the point of Bayone due North, and is distant 18. leagues.

The Pole head of Burdiaur lyeth from Arkason due N. and is distant 18. leagues.

The south Peretris by Rochell lyes from the Cole head of Burdiaur north northwest, & they are distant 12. leagues.

The courses to be kept in crossing the Sea.

IN primis, the Cape of Cleare and the Groine, doe lye one directly from the other, south and by East, and North and by West: and are distant the one from the other 155. Leagues.

The Tower of Waterford lyeth from the Groine, nere hand due North, and are distant 156. leagues.

The olde head of Rinkal and the Groine lye south and to the eastwards, and north and to the Westwards, and distant 155. leagues.

Sillie lyes from Cisarge North and by east, and is distant 133. leagues, and keeping that course, you shall goe foure leagues to the eastwards of Silly.

Ushant lyeth from Cisarge north northeast, and are distant 168. leagues.

The cape of Ortingall and the Lyzard lyes the one from the other north and by east, and south and by west, and are distant 130. leagues.

The seames and the Hauen of Rebadewe doe lie one from an other north and by east, and south and by west, and are distant 94. leagues.

Item, Penmarke lyeth from Vineris north northeast, and are distant 90. leagues.

Mouse hole in Cornewall lyes from Cape Prior, North and by east, and are distant 136. leagues.

Fontenie lies from Ortingal north northeast, and is distant 90. leagues.

Grey lies from Vineris northeast and by north, distant 97. leagues.

Bellisle lies from Ortingall Northeast, and is distant 90. Leagues, and keeping your course so, you shall fall seauen leagues by east Bellisle.

And you must note, that seauen leagues are here reckoned for a kenning.

Item, Set Ile is three kennings to the East wards of the Fourne, and there lies by them a great soncken rocke in the sea, & when you are North and by west from the land so farre as you may well see it from the Patches of the ship, then it seemes like a round plaine Hill, and on the toppe on the east side thereof is a little valley, and it seemes to bee halfe a ships length, and on the west side of the Hill, is likewise a little valley: and it seemes also to bee about a ships length long, and on that valley vpon the west side, stand 2. little Hilles, and the vttermost of the two is the greatest. And then there lies a high hill a good way within the land, and that lies a little by east the foresaid rocke.

And when you are off from the said out Rock northwest and by north, then you can perceiue but one Hillocke vpon that valley that lies at the west ende of the Rock, and then the foresaid high hill lies a little to the west wards of the out rocke, and when you are a kenning from the land, west and by north

by North of the Rocke, that is the East ende of the foresaid deepe Rocke, and the west ende goeth downe a little slope, and you shall see a little hill or knot on the West side of it, and then westwards from the said Rocke lyes another outer rocke, which is something lower and almoste round. And on the east side of the Rocke lyes a little knot, and that is something greater, and a little way to the westwardes of the same, lyeth yet two out Rockes more and are proportioned like as if they were long hilles, and the east side is the longest. And betweene those twaine, lye also 2. little smal Rockes not much above the water, and when a man is a kenning northeast from the foresaide long hill, if ye look out of the top, then it is all alongst betweene those out Rockes full of Rockes: and at the west end of the broadest long hill doe also lye long Rockes, and then a good way westwards of them lies a long ledge of lowe Rockes, and those lye in foure or five parts, and in the same ledge lye foure round hillocks, which are little higher then the ledge, and the most easterly hillocke lies alone a little to the Eastwards from the ledge.

And then when you are past over the Stert, so farre that you can see the land to the northwards of Blanchie haven, then is there a long high hill, and is a good way on the top all plaine, and both the endes goe stooping downe.

The course of the tides of Portingall, Spaine, and France.

ITem, at Calis Palis, an East southeast Moone makes a lowe water.

At saint Lucas of Barametho, a southeast and by east Moone makes a lowe water, and so along from thence to the Riuer of Lishborne the like.

Item all the Coast of Spaine, Gascoine, Poitow, and Brittaine, till Fontenie head: a southeast Moone makes lowe water.

Item, in the Riuer of Burdeaux at the mouth, a south-

east

eaſt and by ſouth moone makes a lowe water.

Item, in the race of Fontenie, a ſoutheaſt and by eaſt Moone makes a lowe water.

Item, at ſaint Mathewes, a ſoutheaſt and by ſouth moone makes a lowe water.

Item, a ſouth ſoutheaſt Moone makes a lowe water at the Fourne.

And likewiſe a ſouth ſoutheaſt Moone makes a lowe water at Aberwracke.

Item, at the Ile of Baſe or Roſcow which is within that Iland, and lies two kennings to the Eaſtwards of the Fourne, a ſouth moone makes a lowe water, and within the Iland, a ſouth ſoutheaſt moone.

Item, two leagues without Vlhant, a South moone makes a lowe water, and the ſame tide holdeth to the Ile of Baſe.

Item, in the faire way off of Vlhant, a ſouthweſt moone makes a lowe water.

Item, ſeauen leagues within the Ile of Baſe, a ſouthweſt moone makes a lowe water.

Item, before Lanion, a ſouth and by weſt moone makes a lowe water.

At the Set Iles, a ſouth ſouthweſt moone makes a low water, and foure leagues a ſeaboord the Iles, a ſouthweſt and by ſouth moone makes a lowe water.

Item, before the Ilands of Brehack, a ſouth ſouthweſt moone makes a lowe water.

And from Brehack to within the hauen of S. Maloes, a ſouth and by eaſt moone makes a lowe water on the ſhore.

And without in the faire way, from the Ile of Baſe to Saint Malloes, a ſouthweſt and by ſouth moone makes a lowe water.

Item, from Rocke to ſaint Mallowes, and from Granuile to Garneſey, there a ſouth moone makes a lowe water.

And within the roade of Garneſey, a ſouth & by eaſt moone makes a lowe water.

Item,

Item, from Garnſay to the Caskets a ſouthweſt moone makes a lowe water.

And 6. or 7. leagues without Garnſay, a ſouthweſt and by weſt Moone makes a lowe water.

Item, betweene Caskets and Portland, a ſouthweſt and by weſt Moone makes a low water: alongſt the Coaſt and 7. or 8. leagues a ſea boord, a weſt ſouthweſt Moone makes a lowe water.

Item, from Bearfleete to the Seinhead, in the faire way, a weſt ſouthweſt Moone makes a lowe water, and when it is a high ſpring, then a weſt and by ſouth Moone makes a lowe water.

Item, from the point of Seine head, to within the River of Seine, a weſt and by ſouth Moone makes a lowe water.

Item, a ſouthweſt Moon makes a lowe water in the river of Seine within.

From the Strowter to Some, in the faire way, a ſouth and by weſt Moone makes a lowe water.

Item, at Some in the Foſſe, a Weſt ſouthweſt Moone makes a lowe water, and at Crotaie, a weſt ſouthweſt Moone makes a lowe water, and at a weſt Moone it is but little floud.

Item, at Bullein and at Callice, at Graueling, at Dunkerke, Newport, and alongſt all the Coaſt of Flaunders, a weſt moone makes a lowe water.

Walterſland.

Item, from Walterſland to the abbey of the Brothers, a ſouthweſt and by weſt Moone makes a ſtill water. And from thence to Blankenborow, e ſaint Katherins, a ſouthweſt Moone makes a ſtill water. And from Blankenborowe to Saint Katherins, a ſouthweſt Moone makes a ſtill water.

Item, a ſouth Moone makes a high water at Swine.

Now

Of the Havens alongst the Coastes of Spaine and Portingall.

ITem hee that will saile into Ribadewe, hee shall goe in hard by the point on the east side, and then hee shall keepe foorth in the middest of the River, till hee come open of the sandie Baye, and there hee may come to ancker at five, seaven, or eight fatham.

And from Ribadewe eight Leagues to the Northwestwards, lyes the sound of Vineris, and he that will goe into Vineris with a southwest winde, hee must goe in by a high point on the west side: and then let him keepe on in the middest of the harborough, going in a good way. And then come to an Ancker, where hee shall thinke good, at tenne or twelue fatham.

Item, west northwest from Vineris, five Leagues off, lyes the point of Ortingall, and it is a high land, and without the point there standes five or six high Rockes, which may bee seene in the Seawards, at the least two kennings of from the land. And those are Cleues, and there is between them and the land 12. fatham.

On the east side of Ortingall is a barred haven, and that goeth to the towne of Saint Mathewes. And hee that will ride there, let him anker before the Village, called Marinoo, which lyes beneath the Castle of Ortingall. And that is but a quarter of a league from the Rockes, which lye of the southwards. And hee shall haue the Village North from him.

And Northwest from Ortiger three leagues or more, lyes, the Haven of Sitero, which is a good harborough, and goeth Southwest in. And the Southside is a lowe point, & he that will goe in there, let him keepe by the south side, for the northside is all Rockie and foule ground. And when he hath sayled a little way in, let him anker at five, seaven, or eight fatham.

When

When you are northy northeaſt from the Cape Prior, about fiue or ſixe leagues, then doth the Cape ſhewe as heere aboue is ſet ſouth.

Item, the flat end is the ſoutheaſt end, and the other end is the northweſt end, and it lies by the Sea, and it is a high Hill and all ragged aloft. When as you are to the northward, or ſouth weſtwards from the Cape Prior, & that you are not farre off from it, then is the Cape verie high all alongſt, and ſeemes on the toppe of it, as though there were many men ſitting on a rowe, euerie one a little way from another: and in the Northſide of the Cape lyes two ſandie Baies one by another, and on the northy northeaſt corner of the Cape lies a rowe of lowe Rockes, and in the middeſt of the rowe lyes a great Rock, like as it were a ſtack of Haye. And when you are come within the Cape, then is there lying on the ſouth ſide of the Cape a ſandye Baye, and to the ſouth of the ſandye Baye, lyes a lowe flat Hill, which is not halfe ſo high as the high land that lies within it: and weſtward from the ſouth end of the flat hil, there lyes two great Rockes hard one by another, and to the ſouthwards of the ſandye Baye, lies a point out from the entrie, within which is the Hauen of Faroll.

When you will ſaile into the Hauen of Faroll, you ſhall beare into the ſound of the Groyne, ſo long till you ſee the Hauen of Faroll open on your Starboord ſide, and then you may beare boldely in with it. And when you are in, then before the towne of Faroll, you muſt go no farther, for within is all ſhole, the hauen lies Northeaſt in, and it is a good Hauen for Carrects which are bound ſouthwards.

He that will ſaile into the Groyne, ſhall keepe his courſe from Cape Prior South and by eaſt towards the Groyne, and if he be without the Cape Prior, then let him keep neareſt to the Eaſt ſide, for the Weſterſide is all foule ground.

And

And he shal see to the southwards from him about two leagues off or more, a long small tower with a flat head, and lookt not helwe verie high above the Sea: and southward from that tower, as you would iudge two helwe stones of, there standes the towne of the Groine: and at the South-east end of the towne standes a Castle, and there is a great foure cornered Tower which hath no couering aboue to be seene: and to the Eastward from the Castle, about foure ships length from the shore, there lyes a ledge of Rockes, and when it is full sea, then you shal see but three or foure rocks breake aboue the water, but when it is a low water, then you shall see a great many. And Southward from the Castle about foure ships length from the land, there lies a little greene Hill, and on that standes a little Church of S. Anthonies, and it seemes as though it were a little flat house, and you must leaue the high Tower, the ragged Rockes, with the lowe Rockes, and that greene little hil altogether on your starboord side, and when yee are cleane past that greene hil to the Southwards, goe westwards in before the Towne, vntill yee bee cleane defended from the Sea, then ye may anker where you will and in what depth ye list.

Item, Vilarge lies a little to the westwards of the Groine and there is a little Iland, and is plaine on the top, & when you are a little way within the Cape Prior you may then see betwixt that little Iland and Vilarge, and there is no good Roade vnder Vilarge, for the ground is not cleane.

When you are northwest and by north of Mongie, then it shewes as heere aboue is set forth.

Item, he that will saile into Mongie, and comes from the eastwards, he shall finde without in the east point a great high Rocke which is called Millen, and by it standes high Cliffes,

Cliffes, which are sharpe on the top: there stands 3. or 4. of them a good way a sunder from an other, and they lye East south east and west northwest, and alongst north from this point, and to the westwards about foure Cable length of, there lyes a Rocke under water: that hee must leane to the sterebourde side of him, and when hee is past the Rocke, then let him go southwest in: and then when he shall see the Church of our Lady that is to the westwards, then let him sayle directlye towards it, and then he may anker before the towne, or betweene the Towne and the Church at 7. or 8. fatham.

Mongy

Item, when you are from Mongie North and by West, then it shewes in this sort.

Item, he that will sayle into Mongie, and comes from the westwards, let him keepe the Cape of the Groine without the point which lies there within, which is a great round point, of a shippes length, and it is called Ventrie: going thus till you haue opened our Ladies Church, and when ye can see the Church, ye may anker at 12. or 15. fatham in the sound, or ye may sayle in before the village to the best roade.

Item, betwixt cape Finister and the point of the Groine, lyes a ledge of Rockes halfe a league into the sea wards.

And whosoeuer will sayle into Mongie, let him take heed of those rockes. And betwixt Finister and the Groine lyes a great sandy Bay: where is good riding with an east wind at 10. or 12. fatham.

cape finister

Item, when you haue the Cape of Finister southeast and by east from you or there abouts, and are distant from it a-

bout

and he needes not come to ancker, before he see them shut in the other point that the high towne stands on.

Item 19. Leagues to the southwards of this Iland of Fayona, lies the riuer of Portugall.

Item the riuer of the port of Portugall, is a good bard hauen, and hee that will goe in there, must keep the south side neerest him. And let him take good heede of the Rockes which lie at the entring into the hauen, and that is but a shorte cut in. The south side is a lower land then the north side is.

Item, eleuen leagues to the southwards of the port of Portugall, lies the hauen Aueiro.

Item, the Hauen of Aueiro is a bard hauen, & the land by the water side is a lowe sandy sand: To saile into this Hauen, you must take your markes vpon the south land, and those are three Beacons of masts, those three Beacons must be kept in one, so long till you bee come almoste hard by them, then you must set of northwards from them towards the other Shingle, which lies in the North side of the Hauen, and there yee may ancker at seauen or eight fatham.

Item, seauen leagues by south that hauen, there lyes the point of Tellacke by Mõdego, which is a faire foreland, and from the south point of Tellacke, a mile to the east, southeastwards, there lies Mondego, which is a bard hauen.

And westward from that hauen a quarter of a league from the land lies a bancke of seauen fatham, & behind that one may ride in 12 or 13. Fatham, it is there good ground and faire, and there is a village there by North Northeast from the roade.

He that will ancker vnder the Burlings, let him ancker before the Eremitage at ten Fathem, hee may come to it by which side he will, for it is cleare there of danger.

Twelue Leagues to the S. southeast of the Burlinges, there lies the Cape of Rockiemper, a little within that point is the Roade of Ballales & he that will ride there may

anker where hee liſt, for there is good anker holde in euerie place, but no couert for a ſouthweſt winde.

Then a league Eaſtwards from the Raſkals of ſaint Gillians point, is the north point of the Riuer of Liſbone, and hee that will ſaile in by the Northland, hee muſte keepe the middle, and ſayle in betwixt the point of ſaint Gillians, and the land of the Rachopes, till he be within the point of ſaint Gillians, and then let him ſaile on foorth by the Northland till hee come to ſaint Katherins Bay, and then he muſt keepe off againe from thence towards the S. land, for feare of the Rockes which lye by the Raſtelles a bow ſhoote from the northland, and that rocke is at a lowe water in ſight, and at halfe flood it is vnder water.

The firſt white Church is Saint Katherins Churche, which ſtandeth vppon the foreland of ſaint Gillians to the Eaſtwards by the water ſide, and the other Church is the Raſtelles: and ſoutheaſt from thence in twelue Fathom, is a good roade for all windes.

He that will ſaile in vp the great deepe of Liſbone comming from the ſouthwards, let him leane the ſand of the Rachopes on his Larboord ſide, and all the other ſands that breake on his Sterboord ſide, and then he ſhall ſee the white ſandy, Baye that lyes next to the Eaſtwards of the point of Saint Gillians, and keepe that Northeaſt and by north of him, going ſtill alongſt the Rachopes in 6. or 7. fatham and by theſe markes he may ſaile into the Bay of ſaint Katherins, and then let him keepe two third partes of the riuer on his Larboord ſide, and the other third part on the ſterboord, and ſaile on ſo vntill he come before the towne of Liſbone, and he that will ancker before the Coupers, let him ancker before the Lime Kil and more a thwart the Riuer, and lay the one anker at 13. fatham, and the other at 4. fatham.

He that will ſaile in before the Fiſher town, let him not come neere the ſhore before the Coupers gate, for there lies a rocke a pretty way off, and it is il riding there about in any place, becauſe the ſtreames turns about ſo there at the eb

and

and it is all rockie.

Item, within a stones cast to the southwards of the Bachopes, is 8. fatham deepe, and by the same sand by the south side, it is 13. fatham deepe within a Ships length of the sand. And let him that will saile out at Saint Gillians deepe, take good heede of the ebbe, for that sets sore towards the sand of Bachopes.

Item, hee that will saile in by the great deepe of Lisbone, let him bring the Castle of the Rastelles, east and by north of him, or let him bring the tower of the Rastelles to the northwards of the souther foreland, keeping them so till he haue brought the little Church at S. Gilians point North northeast, or there about from him, then goe northeast off it towards S. Katherins bay: and alwaies reckon your tides well.

He that will saile to S Tocus, hee must haue halfe flood with him, and must saile east from Cape Pitcher, then hee shall see before him to the northwards, a great high land, when he is past that high land, then let him keepe the point of Cape Pitcher open a good way without the high land, going with those markes till he see the Tower to the northwards of him, then let him saile right with the Tower, till he come neere to it. And when he is as farre in as the Tower, then let him edge into the middle of the channell, and anker at ten fatham.

Item, when you are off from Cape S. Vincent West or thereabout, then dooth it shew as is aboue figured.

He that will ride vnder Cape S. Vincent, shal passe on by the first point, and saile a League further in vnder the other point by a red land, and there ancker at 15. or 20. Fatham, for the ground is all cleane thereabouts, and ye may

saile sast by the shore that ye may in manner leape a land.

Hee that will saile into S. Lucas, hee shall at the entring into the mouth of the riuer of Tiuill, when hee is without before the hauen, keepe the steeple or Tower of S. Lucas to the eastwardes of him, and so goe in at fiue fatham, & ye shall continue to at fiue fatham almost a league. And when hee comes in fiue fatham he may ancker, and then hee shall haue pilots come to him.

Item, to the westwardes of S. Lucas lies a sandy Bay and you may saile alongst by that in fiue fatham, or come to an ancker if you list.

Item, if a man come from the Northwards, or North westwards, then the point of Chipiona lyes thus, & to the southwestwards about two bowe shootes, standes a castle at the vtter point of the land, and sheweth in forme as heere appeareth. And about foure bowe shootes at the westwards of that, are certain rocks, which at a lowe water are drie, that you may see them, you may by night come no nerre to them then 12. or 13. Fatham, and then from thence to Rotta the coast is Southeast three leagues and it is all a white shore and Southeast from rotta lyes out a ledge of rocks aboute two bowe shoots off the shore, and appeares alwaies above water, behinde that is the roade for small shippes. And the Castle of Rotta sheweth thus, & the village standes a little to eff the Northward or there abouts, and hath such a flat steeple, as is heere portraid. And if you will goe with S. Marie port then goe E. or East and by south, and shunne the north shore something, for feare of the rocke that lyes about the middest of the Chanel, about north from the Porkers, and if you will goe to the southward of the rocke then take heede of the Porkers, yet you may come meetely nerre them, for it is indifferent cleere ground to turne in at fiue or fiue fatham.

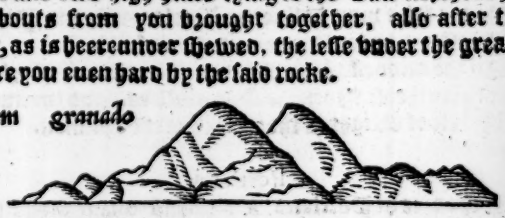
Callis

Callis.

VVHen Callis mallis is northward of you, then dooth it showe thus, as is aboue set forth.

Hee that will ride before Callis, let him saile in by the Rockes which lye to the westwards of Callis, which are called the Pozkers, and he must leaue them Rockes on the steereboord side, and beare in at fiue Fatham or more. And when he is 3. or 4. cables length within the Pozkers, that he may see the Towne of Callis open to the southwards, or South southwest from him, then let him ancker at 3. 4. 5. or 6. fatham. And right off the Pozkers to the northward lye sonken rocks, & there is at a lowe water but a fatham and a halfe vpon them.

Item, the markes for the rock which lies betweene Rotta and the Pozkers in the channell are these, when S. Katherine Chappell which stands by west S. Maries Port by the waters side, and the house that stands vpon the high hill which you goe ouer, two cheeres be brought in one. And S. Maries Cloister in Callis without the north point of Callis, and also two high hilles lying to the East northest, or thereabouts from you brought together, also after this maner, as is heereunder shewed. the lesse vnder the greater then are you euen hard by the said rocke.



Item, when you are come out of the sea, with a large winde, then keepe the two hilles open in that order, as they stand aboue figured, but if hee keepe them shut in one then ye goe directly vpon the rocke.

The Tides alongst the coast of Ireland and England.

ITem, on the West part of Ireland, an east northeast, or a west southwest Moone makes a full sea.

Item, to the Bay of Carmardin, in the mouth of Severne, and without in the channel, and at the Mumbles, an East and by north, or West and by south Moone makes a full sea.

Item, at the Iland of Londey, an East Moone makes a full sea, & the same tide holdeth to the Holmes. And at Bristowe an east and by south moone makes a full sea.

Item, a northeast and by east, or a south west & by south Moone makes a full Sea at Sillie.

Item in the mousehole and in Falmouth an east northeast Moone makes a full Sea, and three or foure Leagues off the shore in the faire way, an east southeast Moone makes a full Sea.

Thwart of Falmouth and Foye in the middest of the Channell, an east and by south Moone makes a full Sea.

Thwart of Plimouth, and Dartmouth, and all betwixt that and Portland in the middle of the channell, an east southeast Moone makes a full Sea.

In Foy, in Plimouth, and Dartmouth, an east and by north Moone makes a full sea.

In the faire way betweene Dartmouth and Portland a southeast and by south moone makes a full sea.

In the middest of the channell over against Portsmouth a south southeast Moone makes a full sea. And the like tide is off the Ile of Wight in the middest of the channell.

Portland.

IN the race of Portland, a southeast moone maketh a full Sea, and in the roade of Portland, an East Southeast Moone makes a full sea.

A southeast and by south Moone, makes a full sea at the Needles in Wight. And the same tide goeth to Wolterhorne

horne on the land, and 3. or foure leagues aſeaboord, a ſouth and by eaſt moone makes a full ſea, and at ſaint Ellens a ſoutheaſt moone.

And it is to be noted that the flood ſets in at the eaſt end of Wight, till the moone be at ſoutheaſt or northweſt.

At Calſhot, hampton, and at Portſmouth, a ſouth and by eaſt Moone makes a full Sea, before Hampton a ſouth moone makes a full ſea.

From Wight to Beachie, a ſouth and by eaſt Moone makes a full ſea on the ſhore.

At Rie in the Cammer and Winchelſey, a ſouth and by eaſt Moone makes a full ſea, and without in the Oſtune a ſouth ſouthweſt Moone.

A ſouth ſouthweſt Moone, makes a full ſea in the roade at Dongie Neſſe, and a ſouth moone vppon the Stell, and without in the channell there a ſouthweſt moone makes a full ſea.

From the Neſſe to Romney head, a ſouthweſt Moone makes a full ſea.

In the channel and hard by the head, a ſoutheaſt or north weſt Moone makes a low water.

Item, a ſouth moone makes a full ſea at Dover, and in the Downes at Tennet, a ſouth ſouthweſt Moone makes a full Sea, and a ſouth or north Moone makes a full ſea at the Shore.

The courſe of the ſtreames of Ireland, and England.

IN primis, from the Cape of Horſey, to the Iland called Hordon, the flood runnes north northweſt, and the ebbe ſets ſouth ſouthcaſt.

From Horſey to Cape cleere the flood runnes Eaſt and by north, and the ebbe weſt and by ſouth.

From the Cape of Cleere to the Ilands called Salteis, the flood runneth eaſt northeaſt, & the ebbe weſt ſouthweſt.

From the Cape of Ireland to the Iland of Londey. the floods

flouds sets in northeast and by east, and the ebbe southwest and by west.

From Londey to Milford, the flood goeth east southeast and the ebbe west southwest.

From Milforde to Caldie, to the Bay of Carmardin, which is the mouth of Seuerne, & to the Ilands of Mowlesse, the flood runneth northeast and the ebbe southwest.

In the middest of the mouth of S. Georges channell, the flood runneth north northeast, and the ebbe west Southwest.

In the Channell of Bristowe, the flood sets east northeast, and the ebbe west southwest.

From Sillie to the Lyzart, the flood runneth east and by north, and ebbes west and by South.

From Sillie to the lands end of England, the flood sets east northeast, and the ebbe west southwest.

From the Point of the lands end, to the cape of the Lyzard the flood sets east, and the ebbe west.

From the Lyzart to the Stert, the flood sets northeast and by east, and the ebbe southwest and by west.

Item, in the middle of the channell, against Falmouth, Foy, Plimouth, and the Stert, the flood runnes northeast, and the ebbe west southwest.

From the Stert to Portland in the middle of the Channell, the flood runnes East northeast, and the ebbe West southwest.

Against Dartmouth about two leagues from the shore, the ebbe sets southwest and by south, and to the Eastward, and on the south southwest side of the entring in towards Excester, about two leagues from the shore, the ebbe sets likewise southwest and by south.

Portland.

Item, within Portland in the Bay, the flood sets northeast and the ebbe southwest.

From Portland to Wight the flood runnes east and by

by north, and the ebbe west and by south.

From Wight to Beachie, the flood runneth East and by north, and nie to the land in 15. fatham. the flood runnes northeast and by east, and the ebbe southwest and by west.

He that will saile into Sillie comming from by South, let him looke well in time, and take good heede of the rockes which lye in the middest of the sound right before the mouth, and hee may saile in on eyther side, but it is best to keepe next to the east side, and keepe the steeples or towers in the middle of the same Bay, and then hee may beare in an anker at 6.7, or 8. fatham.

Item, when the Bèl or point of Portland beares northeast, and by east from you, and that you are 2. leagues or more from the shore, then dooth it shewe thus as before is portraid: but to the Westwards is much more land then here is set forth, and a great deale of the west part, the land seemes whitely to looke to.

Item, when Portland beareth North and by East from you, and that you are five or sixe leagues off from the land, then it shewes thus as above: & when it lies north Northeast from you, then it seemes plaine above and round to looke on, From Dongle Nesse to Dover, the flood sets Northeast and by east, and the ebbe northwest & by west, at the south foreland the flood sets northeast and by north and the ebbe southwest and by south.

Heere

Heerafter followeth the hauens alongſt the weſt coaſt of England.

ITem, eaſt northeaſt from Beachie nine leagues off lyeth the Nelle, which is a faire lowe point weſtward from the Nelle: two leagues off lieth the Cammer of Rie, a hard hauen, and hee that will faile vnto the cammer comming from by weſt, he muſt keep Beachie open without the point of Fairlee, and beare Eaſtwards in till hee haue brought the houſe northweſt from him, & then ſayle by the Shingle in, and when hee comes at the end of the Shingle, then let him anker within a cables length of the Shingle northweſt from the point in ten Fatham, it is not wide there.

Beachey

Item, when Beachie lyes northweſt and by north from you, And that you are about foure or fiue leagues from the land, then it ſhewes thus: and it is a white chalkie land.

Item, he that will ride vnder Beachie hee may anker where he will, the Eaſt ſide is all ſhold, and on the Weſt ſide is all good ground.

Beachy

Item, when Beachie lies northeaſt off from you, and that you are two leagues from the land, then dooth it appeare thus, as aboue is figured.

Beachie lies from the Caſkets, northeaſt and by eaſt about ſortie leagues.

Wight

Item,

Item, when Wight beareth Northwest from you, and that you are foure leagues from the land, there you shall haue 35. fatham, and the ground is great rough stones.

Hee that will saile in at the east ende of Wight, let him take heede of the Owers, and fetch the holding of the west side of the deapth before saint Ellins Church, and there hee may ride at seauen or eight Fatham. And hee that will sayle in, let him bring the Lime kill that lies aboue Portsmouth, and the steeple of Portesmouth in one, & so sayle in keeping two third parts of the channel on the Larboord side and sayle in so to Coilshot.

At the East end of Wight a northwest Moone makes the entrie of the first quarter of the flood.

He that will sayle in at the west end of Wight, he muste looke well to the tide, for the flood sets verie sore vpon the needles, and the ebbe like wise westwards vpon the Swingilles, and chalkie Rockes, which lyes westwards of the Needles, and is verie narrow between the Needles and the swingilles, and let him directly sayle with the Needles, euen till he come fast by them, and sayle in verie neere them, and when he is once within the Needles, then let him keep off from the land before him becauls of the rocks called the Wardens, which lies on the Wight side neere the shore.

And hee that will ride vnder the Beachie which lies on the other side, let him ancker at seauen Fatham, and if hee will goe any further in, let him keep two third parts of the Channel towards the maine land, and saile so in till hee come before the Village of Yarmouth, where the new Bulwarke standes vpon the Wight side: and if he will saile vp to Caulhot, then he must saile on till hee may see the town of Hampton appeare without the abbey, and ancker nereft to the west part of Caulhot.

He that will ride without Purst by the Needles, let him beare in and ancker before the Village in the North Channell at three Fatham at a lowe water, and he shall haue the Needles South southeast from him, and at a deepe tide, the

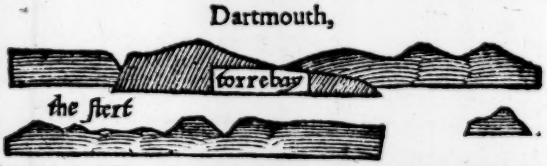
flood

lond dooth not rise there above one Fatham.

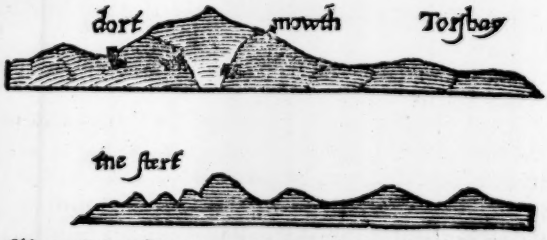
He that will ride in Portland roade, let him ancker at 7. fatham.

Item, 12. leagues to the Westwards of Portland, is a roade called Torbaie, and lies within the head which is called the Berrie, and Portland and that lie east and West, and on the East side of the Berrie head standes a Church and there against the Church is verie good riding at 6. or 7. Fatham.

Item, when as Torbay beares North Northwest from you, and that you are about three Leagues from the shore, then the land appeares in this fashion.



He that will ancker under the southpoint of Torbay let him ride at 7. Fatham, and he shall ride well for a southeast winde.



Item, when Dartmouth beares north northwest from you, and the point of Torbay north and by east of you, then sheweth the Stert and Dartmouth after this manner as is heere figured, and then you may see the little Bulwarke in the East side of S. Patricks chappell in the west side, and a little flat Church to the westwards of you.

Item

Item, the Stert lies from the Fourne, north Northeast easterlye, and they are distant 43. leagues.

Item, when the Stert is west northwest from you, and two leagues off from it, then doth it shewe like as is aboue portraied.

Item, when the Stert beares Northwest from you, and you being 4. or 5. leagues off it, then doth it shew like as is heere aboue set forth.

Portland lies from vlhant Northeast, and is distant 48. leagues.

Item, When Portland lies west and by north from you, then it sheweth after this manner.

Item, when Portland beareth Northeast and by North, then dooth it shewe thus.

He that will saile into Dartmouth, let him goe directlye with Saint Patricks, Chappell, which standes on the west pointe of the Hauen, and let him take heede that he doe not bring that village which standes within on the west side of the hauen without Saint Patrickes Church, but let him keepe the vttermost house of the same village on the East side of the hauen, alway in sight without the Bulwarke of the west side by Saint Patrickes Chappel, and then can he not take any hurt on the rockes in the Range by the West point, and when hée is a little way within the point that lyes on the east side, he shall sée a sharpe corner of a Cliffe, e

without

without that sharpe corner of the Cliffe lies a rock vnderwater very dangerous, let him leaue that on the sterebord side, and when he is past that Rock, then he may keep himselfe in the middest of the hauen, and beare in without danger.

He that will ride vnder the Stert, let him Ancker in ten Fatham, there hee shall haue cleane ground: the roade is to the Eastwards of the Stert: To the West Northwestwards of the Sterte fiue leagues, goeth in the founde of Plimouth, he that will goe in there, must beare in the middest of the sound directly with an Iland that hath a Chappell on it: and if hee be disposed to ride within the Iland: when he is so farre in as the Iland, then hee must borrough hard by the East side there of in 10. fatham, and when hee hath brought the Iland to the southwards of him, let him anker in fiue or seauen fatham.

Hee that will saile into the Easter harborough which is Catwater, let him goe alongst by the east shore, till he come before the Blockhouse at the entrie of Catwater, and hee must take verie good heede of the southeast point of the entre of Catwater, for it is al foule ground & shallowe: let him saile in by the Northwest point within two ships length of the Blockehouse, & then runne into the northeast & by E. about a bowes shoote in, and ancker in 4. 5. or 6. fatham.

To the Westwardes of Plimouth lyes a round hedge, which is called Rams head, & south and to the westwards of that 3. leagues into the sea, lyes a rocke which is called the Edie stone, and it lies south southwest southerlye from the Howe of Plimouth.

He that will ride vnder the Rams head to the eastwards may ancker at eight or nine Fatham within a bowe shoote of the Cape, for there is all cleane ground.

Item, foure leagues from the Rams head to the Westwards, lies an Iland hard by the shore, & it is a little round Iland, and with small Barques ye may ride within it, and goe through betwixt the maine: & in the east side is the best comming in, and the best riding is against the middest of

the

the Iland, hard by it to the eastwards goeth in Lowe hauen.

Item, two leagues to the eastward of Lowe, lyes the hauen of Foye, and a little byeast Foye, lyes a Rocke vnder water, and so long as you can see Lowe Iland without the point which lyes to the westwards of it, you can take no hart by it.

Item, Foye is a hard hauen, and at the entrie of the hauen, there stands on either side vpon the high land, a church, and that which stands on the east side is the lesser, they are square towers something white, and hath a flat steeple at the west end.

Ye that will saile into the hauen of Foye, must haue halfe flood at the least, and let him saile in the midst of the chanel, and when he is betweene the two poynts, he may keepe alongst which shore he will, but the west shore is the wydest chanel, by the a rockes and tower of the steeple which stands in the west side of the hauen: and if he come in by the west shore, then he must when he is within those stakes, bear off a little from the west shore, almost into the midst of the chanell next to the west shore. Before the village which lyes on the west side, is a little dock, and there a ship may lye a flote at a lowe water, or yee may sayle further in, and then you shall see a wall standing on the west side of the hauen, and a village behindit, there is good ankering, a ships length by south that wall on the east side, but he must ride by two Cables: or else you may sayle further in alongst by that Swach that lyes on the west side, wherein the water mill stands, but take heed you come not too nigh the north corner of the Swach, for there lyes a rocke, and when you are a little past that, ye may towe into the midst of the streame, there is best lying for ships that drawe much water: and to the southwards of the foresaid wall, a ship that drawes 18. foote water, may well ride a flote.

Item, there lyes within the east poynt, a village euen at the first entrye, and before the village is a poole, where two or three ships may well lye, and the deepest is within

at the east point. And if he that comes in by the east shore, will not goe into that poole, then let him (when he comes a little way within the stakes on the east shore) sail something off and keepe nereste to the west shore, for on the east side lyes a Flatte all alongst, vntill you come against the first house of the west village. And if perchance the winde were so scarce that you cannot beare in, then ye may come to an anker without, so as the ship may ride without the stakes. And then ye may warpe in with Hausers, and lye behinde the stakes, with a ship that draweth twelue or fourteene foot water a flote at a lowe water.

Item, the hauen lyes N. northeast in, till you be past the Churche of the Village which lyes on the west side, and then it lyes north in, til you be past the watermill, and then north northeast in.

And he that will anker without, to tarye his tide, or for any other occasion, he may come to an anker at fiue, seauen, or eight fatham, so that he haue the Church that standeth on the east side, north northeast of him, for there it is cleane ground all without.

The hauen of Foye and Dudeman, lye the one off the other, southwest and northeast.

Whosoeuer sayleth into Falmouth, let him take good heede of the rocke that lyeth without in the middle before the entring. And he may leaue the rocke on which side he will, but the deepest water is to the eall ward of the rocke. And when you are past the rocke, then may you anker in the middest of the hauen where you will, at fiue, fiue, or seauen fatham, and take heed how you sayle in any further, for feare of the bankes, which lye within. And if you will sayle within the bankes, then you must haue good knowledge of the markes of the hauen.

He that will sayle into Helford, had need to take a quarter flood with him, and let him sayle by the east poynt nigh the land at foure fatham till he see the steeple on the south side beare south of him: then he may anker against the steeple

steple at foure fatham. And by the west poynt lyes a rocke vnder the water, in the west side of the hauen.

He that will come to anker in the road of Poulhole, he must sayle hard to by west of a high round hill, and to the northwards of the hilles side, lyes a white ledge of rockes on the shore, and against that is the road, in fiue or at seauen fatham, it is not verie cleane ground.

He that comes from the south, and wil sayle into Dillie, let him looke out in time, for feare of the Rockes, which lye in the middle of the entring, right before the mouth on eyther side, but it is the best to keepe neerer the east side, and then keepe the Church of Saint Maries in the middest of the sandy Bay, and then you may anker at fiue, seauen, or eight fatham.

Item, Dillie lieth west southwest off the landes end of England nine leagues.

Item, from the point of the lands end, to the Lyzard, the course is southeast and by east eight or nine leagues.

Sandes at the Thames mouth.

NOw to knowe the markes of the last, there stands a thick bushie tree vpon the foreland, and you must bring Margate by south off that Bushy tree, to light within two yardes length, and keepe them so, & you shall passe betweene the Norther, and the Souther last, and when ye haue brought the reconciuers in one, then are you out of the danger of the Lasts, then keepe on your foresaid course toward Sheppy, & when you haue brought the high land of Sheppy to the Southward of you, then you shall see a white Church standing on the North side, and three or foure high trees there by it: bring the said white steeple into the trees, and goe so into the lowernesse, and then you shal come to the sea Rocks, and that lies West Northwest in.

At the Foreland, a south or north Moone makes a full sea, and the Reculuers are two sharpe steeples vpon one Church, take heed you come not on the lands end at a lowe water, for there is not aboue two foot water deep.

The deapth ouer against England.

IN primis, the Coast of Flaunders in the right and vsed channel, is not aboue 24. fatham deep.

In the midst of the chanel betweene Douer and Blackenesse, lees a banke, which hath not at a lowe water aboue 3 fatham deep on it.

And within halfe a league to the southwards of the bank, it is 27. fatham deep, and to the northwardes, fiue and twenty fatham.

Betweene Winchelsey and Pickardie, the deapth is 26. fatham.

Item, vnder Ouldersey in the channel, the deapth is 25. fatham.

Item, the channel byeast of Beachie, two leagues off, is 27. fatham deep.

Betweene Beachie and Seine head, in the channel, is 38. or 40. fatham deep.

Betweene Wight and Beachie, it is in the channell, 38. or 40. fatham.

And three leagues without Wight, it is 37. fatham deep, and it is not very cleane ground there.

Item, from Berefleete to the middest of the depth of the channell, you shall finde it all rockie, and from the middest of the channell, to the East of England, it is all cleere ground.

It is very perillous to trust to sounding by the Iland of Alderney, for hard by the land is fortie fatham deep, and west southwest off, by the Raskets, it is eight and thirtye fatham deep.

Betweene Portland and the Raskets in the channell, is fortye fatham, And two leagues a sea-boord the Iland of Alderneye, is a certaine place, which is but thirtye fa-

tham

tham dæpe, whereas in all other places betweene Wyte-land, and that Iland, it is forty Fatham dæpe in the channell.

Item, in the forth southwest mard, about a kenning from the Stert, is about fortye Fatham, and the ground is red sandy clay.

South southeast into the Sea from the Stert, and a kenning of it, is 45. Fatham dæp, and sayling from that depth southeast a little further foorth, yee shall finde 55. fatham. And these uncertaine dæpes are betweene Rocketo and the Stert.

Item, to the Southwards of the high land of Wartmouth in the sight of the land, it is about 43. fatham dæpe, and the ground is white sand, with some little shelles amongst it, & verie little small long things like unto such Waggots as are sometimes in Bacon.

Item, 5. or 6. Leagues southwest from the Stert is 40. Fatham dæpe, and the ground is gray red sand reddish, and shellie.

Item, 10. or 12. leagues Southwest from the Stert, it is 47. fatham dæpe, the ground is blacke grosse sand and shellie, and little rough thinges like Waggots, with some small stones amongst.

Betweene Wartmouth and Set Alex, in the channell, is 55. fatham, and from the towne of Plimmouth 4. leagues south southwest into the Sea, it is 30. fatham dæpe faire white sand.

Betweene the Lyzart and the Stert, comeno neater the land by night then 40. Fatham. And if you will ancker betweene those two heads, you shall ancker at 25. fatham, and be within the streame of the fayre land.

Betweene Foy and the Ile of Basse in the Channell, is 58. Fatham, and at the lands end of England it is 50. fatham dæpe.

Betweene the Iland of Londey and Silly, it is in the right course 40. fatham dæpe.

Item ten leagues to the southeastwardes, from the Iland of Saites is but 20. fatham, and the ground is small redozie sand.

Item betweene Pilsord and the Saites, in the channell is 40. fatham.

East southeast from the dale of Pilsord, right against it about a bowe shoote off lyes a sonken rocke under water.

From the Iland of Saites to the Cape of cleere, in the right course is 56. fatham, come no neere the land in the night than 40. fatham, for then you are but three leagues from the land.

Item, if you sound being thwart of the cape Cleere, & finde 80. fatham deepe, and the ground clammie, and small white sand, then if it bee cleare weather, you shall see the Cape out of the top, and that ground and deapth is to the southward of the cape.

Item, southward from Dozsey three leagues from the land, it is 70. fatham deepe, & the ground is grey sand mingled with small shelles.

The lying of the land of England alongst the coast.

IN primis, the point of the Nesse, lies from the point of Doner southwest.

Beachie lieth from the point of the Nesse West Southwest.

Donnoze in the Ile of Wight lies from Beachie West and by South.

Item, the coast alongst the Ile of Wight, lyes West and by north, and the Wight lies from Nulfers Hauen Westwards.

Portland lies from Wight, West Southwest twelue leagues.

The Hauen of Dartmouth lyes from Wight west south west westerlye.

The

The Stert lyes from Portland west and by south, 16. leagues.

Plimmouth lies from the Stert, west northwest five or seaven leagues.

Dowman lies from Plimmouth, southwest and by west 13. leagues.

The Lyzart lyes from the Stert, West and by south 25. leagues.

The lands end of England lyes from the Lyzart, West northwest westerly 8. or 9. leagues.

Item, it is from the point of Dover to Beachis eighteene leagues.

And it is from Beachie to Donnoze 20. leagues.

From Donnoze to Portland, is 16. leagues.

From Portland to the Stert, is 16. leagues.

From the Stert to the Lyzart, is 22. leagues.

From the Lizart to Sillie, is 18. leagues.

And from the Lyzart to the landes end of England is 9. leagues.

From the lands end to Sillie is 8. leagues.

Sillie lies from the lands end of England west southwest, and from the Lyzart Sillis lies due west.

The lying of the land about the lands end of England, and of the coasts of Ireland.

IN primis, the Iland of Londey, lies from Sillie northeast and by North, and are distant 3. leagues.

Waterford lies from Sillie, North and by east 30 leagues.

The haven at Waterford lies from the lands end of England, northwest and by north, 31. leagues.

The haven of Crock lyes from Sillie northwest 25 leagues.

The Cape of Cleare lies from the Iland of Salteis, west southwest 43. leagues, and betweene them lies the Old head whith lies from waterford 24. leagues.

The Iland of Salteis and the Iland of Bennaries or Holihead, lie the one from the other northeast and by north, and southwest and by south, and are distant 42. leagues.

The Ilands of Dorses lyes northwest and by west from the cape of Clere, and are distant 12. leagues.

The Ilands of Blaskey lyes from the Dorses, North and by west, and are distant 19. leagues.

The Cape of Strauen lies from Blaskey North and by west and are distant 8. leagues.

The courses, the lying of the Coastes, and the Tides vpon the North Coast of England.

Orfordnes. Leistow. Yermouth. Winterton.

NOte well, that heare the flood comes from the Northwardes. And first you shall vnderstand, that the lands end and the Nelle, lies North and something to the Westward, and south something to the eastward, & they are distant two great kennings, and there a south or North Woone makes a full sea.

Item, from the Nelle to Orfordnes, the course is north, northeast and to the eastwards, & they are distant two small kennings, and a south or north Woone makes a ful sea.

Item from Orfordnes to Leistowe, the course is north and they are distant 8. leagues, & at Leistowe a south southeast Woone makes a full Sea.

Item, when you haue the foreland southwest of you, and that you are about eight leagues distant from it, there are soundes of 17. 20. 23. and of 24. fadom, & the ground is red sand with white shelles, and some stonye ground likewise.

Item

Item, our Ladies bancke lyes at the head betweene Calis and Blacknes, abone 7. 10. or 12. fatham.

Item, hard by Goodwin, yee shall haue 26. fatham, and the ground is grosse red sand.

Item, the west point of the Foreland and the Northeast point of Goodwin sands, lye the one off the other southeast and by east, and northwest and by west, and are distant 10. Leagues.

Item, the Souther head of the Goodwin, and the point at Dower, lye the one off the other, southwest and northeast.

Item, from Leistowe to Yarmouth, the course is north northwest, and they are distant 2. leagues, and a southeast or north northwest Moone makes a full sea at Yarmouth.

Item, from Yarmouth to Winterton the course is north northwest, and they are distant 2. leagues.

From Winterton to the Sheild, is no direct course, but they are distant 9. leagues, & there, an east or west Moone makes a full sea.

Item, from the Sheild to Humber, the course is Northwest, and they are distant three kennings, & a west southwest moone in Humber maketh a full sea.

Item, from the Shields to Flamborough head, the course is Northwest, and they are distant 30. leagues.

Item, from Humber to Flamborough head, the course is North and by west, and they are distant 12. leagues.

Item, from Flamborough head to Whitby, the course is northwest and by west, and they are distant 10. leagues.

Item, from Scarborough to Whitby, the course is north west, and they are distant 5. leagues.

And betweene Scarborowe and Whitby, lyeth Robin Hoods Bay, and a Southwest or a northeast moone, makes a full sea there.

Item, from Whitby to Hartlepoole, the course is west northwest, and they are distant eight leagues.

Item, from Hartlepools to Tinmouth, the course is north northwest, & they are distant nine leagues, & a south-

west

weſt or a northweſt Moone makes a full ſea there.

Item, all alongſt the North Coaſt of England, the flood comes in from by north.

Item, from Robin Hoods Baye to Tinmouth or Newcaſtle, the courſe is northweſt.

Item from the Neze of Norwaye to Skeutneſſe, the courſe is Southeaſt and Northweſt, and they are diſtant fiue kennings. And to know Skeutneſſe it is a plaine lowe land, and to the eaſtward of Skeutneſſe, there goeth in a deepe ſound towards Berghen. And on the eaſt ſide of the ſame ſound, lies a high round rock or Cliffe dzie aboue water.

A note how you ſhall knowe Skeutneſſe.

SKeutneſſe is a plaine lowe land, and to the eaſtward of it dooth a ſound run into the Berghen And to the eaſtward of the ſaid ſound, lies a high round rocke or Cliffe, and is called the Bocke. And foure leagues to the ſouthward of the ſame ſound, lyes another round rocke or Cliffe in the ſea, & is called the weſt Stone, and between the weſt ſtone & the ſound lies a little lowe Iland which is called the Whitings eye, and to the weſtward of Skeutneſſe 4. leagues in the ſea lyes a little Iland which is called Whitſkerſen, and ſhewes as it were two little hilles, but it is not high.

Item, Skeutneſſe and Olderſound lye one from another, north northweſt, and ſouth ſoutheaſt, and are diſtant ſeauen kennings.

Item nine Leagues to the northward of Skeutneſſe lies a high round Cliffe which is called Ficke, and to the Southward of it, dooth goe in the Wemmell a little by north the Saltfoorde, and to the ſouthward of the Saltfoorde it is all lowe land, and to the northward is high land.

Item, betweene Skeutneſſe and Olderſound, beeing a prettie way from the land, if you looke on it, it ſeemes as it were all broken land on the ſouth ſide, and there are ma-

ny

ny ſounds that goe in betweene Skeutneſſe & Olderſound.

Item, to knowe Olderſound, there is a high cliffe that lies alone, and when you are a good way off to the northwards, it ſhewes like a ſaile to the ſouthwards of you, and ſeeing it from the weſtward, it is round.

And from Olderſound to Kin it is foure leagues, & they lie north and ſouth, and betweene thoſe two is a hauen, but you muſt either goe into Olderſound, or into Kinſound, and a ſeabooard Kinſound, a good way from the land, are many high rockes. And to knowe Kin, there is a round like rocke at the ſouthweſt end of Kinſound, that ſtandes by forked, like a Biſhops miter, and lies all alone.

Item, from Kinſound to Olderſound is three Leagues, and they lie north and ſouth, and betweens thoſe two lies a high round ſharpe Rocke, and there is no hauen betweene them.

Item, from Olderſound to Stade is eight leagues, and they lie northeaſt, and ſouth ſouthweſt.

Item you ſhall vnderſtand, that betweene Olderſound and Stade, is a high land, and there you may ſaile all alongſt by the ſhore, there are no out rockes, whereby you may take any hurt, for they are all in ſight. And there is a good hauen in Olderſound, and by Kinſound is likewiſe a good hauen which is called Ulwatch.

Item from Stade to Flouare, or Herle, is foure leagues, and they lie eaſt northeaſt, and ſouth ſouthweſt, and is all broken Cliffes betwixt.

Item, from Stade to Flo Godſche ſound, the courſe is northeaſt, and S. w. & they are diſtant 7. leag. & Flo watch is a round Cliffe and lies alone, and the Eaſt end to looke vpon, ſeemes a little lower then the weſt end, and comming in from the ſouthwards, or by the ſouthweſt end, there goeth in Flo, and it is a good hauen: and by weſt off that you ſhall goe into Oiſke, and that lies in the eaſt and Weſt, and is a verie good hauen, and betweene Stade, and Godſanne, lyes a little Iland which is called the Swin, and is cleane

ground

ground to sayle about.

Now for to knowe Giske, it is lowe plaine land, and there is a church with a church yard on the land, and before it lies a blacke rocke, and two or three sonken rockes, wheron the sea doth commonly breake.

Item, when as you are three or foure leagues West in the sea of Giske, then dooth that land lye alongst northwest and southeast, almoste threescore and seauen leagues, and then more easterly.

Now sayling from Giske, you shall not of long come to any other land, but an Iland called Grip, then when you are thwart of Stames Heft, which lyes on the maine land, for Grip lies a kenning off into the sea, and to the Southward of Grip is the best going in. And your course from Hellen is all easterlye, and then you shall see a high land, lying before you, & that is called Tolter Polter. And when you come by the east land, run all northeast in, so long till you haue a streme or a tide that mètes you, and you haue hauens on both sides of the land.

The courses to be kept in sayling on the Coast of Norway.

NOw hee that will sayle in at the easter straite or entrye by the Naze of Norway, let him with an east winde sayle in hard by the Naze, & let him take hæde of the rock called the Bishopboden, for that lies in the middest of the entrie, and lies aboue water. And when you shall bee within that sound where you shall ride in, there lyeth a beme within the head of that land: anker behinde that where you will.

And if it be so, that you will goe in at the Easter straight or entrie, then you shall beare in by Marcu, and when you are a little within, there standes a little Warder which is a Beacon or marke before the entrie, which you may see there we the middest, and take heede of that shelf, and then goe on so in, and let fall your ancker.

Item,

Item, if you will sayle in at the Scarsound, you shall knowe that land by the Cow and her Calfe, which is a broken land, and there lyes a rocke without, which is called Wels, and there is a nother which is called Spurney, and then when you come forther inwardes as far as the Hart, then you may sayle between the two Beames or marks, or else through between the other shore and the two markes.

Item, if you will saile into Helnesse, then keep you nere to the west shore, there lyes a rocke which is called the Cognaile, take good hed of that. And also there lyes yet an other which is called the Gray Hollome, you must leaue that on your starboord side: there are two Beacons set up, and when you haue brought those two in one, then are you euen thwart the Cognaile: and then as you come inwards, there lyes a Bome, which is a marke to take heed by, on the Larboord side: You shall knowe that land, by that it is a high land. and to the eastwards lyes the Dommelles, and you may well see the Church of Wardowe, and if the weather be such that you cannot fetch Wardowe, then you shall ronne three leagues further into an other hauen, which is called Longe, there lyes a round dyerocke before it, and there stands as it were a Beacon with a Barrell on it, keep well on that shore where the Barrell stands, and at the entring in on the starboord side, there is a hand which poynts you to holde off from that place: and also there is a Baye or Bome which lyes in two fatham and ½. you must take heed of that place.

Item, if it were so that you would saile into Colle-sound, then you shall hale in by a high lande which is called Winge, and there stands fiue Warlockes or Beames upon it. the middlemost is the highest. and is on the north shore, and if you come out of the Sound, you shall knowe that land by the Diskill, and those are all out-rockes, and there where the fiue Warlocks or Beacons are upon the shore where the middlemost is the highest, there you must keepe something off from Diskill, for it is not all cleere, and keepe

on

on to North, or rather to the westwards, then to the eastwards there abouts, for that shore is cleare of Rockes, and look that you run not vpon the Rockes which lie aboue water, behinde which you shall ride.

The courses and distances alongst the coast of Norway.

ITem, wederow and the Scaw doe lie the one of the other northand by west, and south and by east, and are distant thirténe leagues.

Item, from the Naze to Scarsound, the course is east northeast and they are distant foure leagues.

Item, from Scarsound to Flecorie, the course is east northeast and they are distant 5. leagues,

Item from Flecorie to Réperwicke, the course is east northeast and they are distant two leagues and a halfe.

Item from Réperwicke to Wardowe: the course is northeast, and they are distant 8. leagues.

Item from Wardow to Longsound, the course is north northeast, and they are distant 8. leagues.

Item from Longsound to Verdro, the course is Northeast, and they are distant 11. leagues.

Item, from the Naze of Norway to Vinesound it is a league, and Vinesound lyes in Northwest.

Item, from Vinesound to Scarsound or Westersound, the course is northeast, and they are distant a league.

Item, from Scarsound, to Yellicksounde it is foure leagues.

Item, from Yellicksound to Flecorie is a league, and then fourth two leagues to Woolfsound.

Item, from Woolfsound to Blindsound, it is a league, and to Yesnes three leagues.

Item, from Yesnes to Wardowe, and to Otersound, three leagues.

Item, from Otersound to Joffer land, 2. leagues.

Item, from Joffer land to Longsound it is a league, and likewise to Larwicke three leagues.

Item, from Larwicke to Saint Wéert, a league.

Item

Item, from Saint Wæert to Wiles water, thrée leagues.

Item, from Wiles Water to Werdero, thrée leagues.

Item, from Werdero to Roſt foure leagues, & from thence to Jackſound foure leagues.

Item, from Jackſound to Otturen a league, and Nozder Wickholme a league.

Item, from Nozder Wickholme to ſouder Wickholme foure leagues.

Item, from the Wozt to Buſher two leagues, and ſo foozth to Waleſound a league.

Item, from Waleſound to Birkeſound a league, and then foozth to Walſtrand thræ Leagues, & then foozth to Calfeſound foure Leagues, and there men goe into Roy, and ſo foozth.

From Calfe ſound to Rekkeſand thrée leagues, & there they ſaile into Welues.

Item, from Rekkeſand to Weſterſound, behinde Ning foure leagues. From thence to Wæsbergen it is thræ leagues. And from thence to the Col, fifteene leagues.

The going in by the Weſtergate, or entrye of Flecory.

ITem the weſter gate oz Weſter entrye of Flecozy dooth lie in Nozth nozthealt, & the eaſter gate oz entrie lies weſt nozthweſt in. And you muſt leaue the Iland, with all the great rocks on the larboozd ſide & keep within the white Holm, & leaue the little blacke rocks on the larboozd ſide, and there you ſhall haue eightéen fatham deepe, and befoze the eaſter gate entrie, you may ſee the Foye.

Item a league to the Weſtwardes of the Heſnes there lyes Hamerſound, where are gray ontrocks.

Item, halfe a league to the Eaſtwards of Hamerſound lyes

lyes Kerkfort, and there ſtands two Beacons or warlocks vpon the blacke rockes, and the one ſtandes on the Starboord ſide, and the other on the Larboord ſide. And firſt goe in northwards, and then after more eaſterly, and anker in thirteene fatham: and towardes the weſt ſhore in the faire way, lyes a blinde rocke, which hath foure fatham at a full ſea vpon it.

Item, halfe a league to the eaſtward of Kerk fort, lyes Veſnes, and if you will goe in there, then keep a good breadth off from the weſt ſhore. for there lyes a Rocke before it at the entrye, which is called the Cognaile, and there is another rocke called Gray Hollome: you ſhall leaue thoſe on the ſtarboord ſide, and there ſtandes two Maſtes ſet vp vpon it, and when you haue brought theſe two Maſtes in one, then are you thwart of the Cognaile. And as you come inwards, there lyes a dye rocke on the Larboord ſide. And you ſhall knowe that land, for that it is a high land and the Dommelles are from you, north north-weſt: and to the weſtwards are gray rocks, and to the eaſtwards are round rocks: and hard by the ſea ſide there ſtands a white church, which you cannot ſee vnleſſe you be hard by it.

Item, when the Dommelles lye northweſt of you, then are you open of Hardow, and the eaſt end of the vttermoſt Wainholme and that Iland, lyeth north and by weſt, and ſouth and by eaſt, and you muſt lye northweſt in, if you will goe cleere of them.

A league to the eaſtwards of Hardowe, lyes Oſſenfort, and a league to the eaſtwards of Oſſenfort lyes Fuert: and when the Dommelles lye weſt from you, there lyeth Longe, and before it lyes a round rocke, and there ſtands a Beacon or marke vpon it with a Barrell, keepe you neere by the land whereon the Barrell ſtands. And there ſtands a hand to the Starboord ſide of the entrye, and that hand poyntes, that there lyes a blinde rocke, on which is but eleuen foote water.

Item, the weſt Stanfort, and the eaſter Riſen, lyeth three leagues

leagues to the Westwards of Jofferland, and one of them goeth North in, and the other goeth west in.

Item, a little to the Westwards of Jofferland lyes the Kill.

Item, hee that will saile into the Kill, let him keepe the high hill that lies next vnto Jofferland, alone within the land to the west of Jofferland, and when you haue the Hill Northwest and by west from you, then you are open before the Kill. And vpon the West shore stands a Beacon, and it is a white point.

Item, betweene Jofferland and Langsound, doth lie Abbisuert, by great steepe rough rocks.

Hee that will saile into Langsound, hee must goe North Northeast in, from the easter out Scarre of Jofferland, and these great out Rockes of the Nesse, and then North northwest, goeth with the high rough round Rocke, where the barres lyes before, so all is north north west in.

From Verdro to Hoenwater, the course is north and by west, and thence to Roge North north east, and if you will ancker by Roge by east, it is a shold sandy Bay. And you may likewise saile through betweene Roge ane the Calfe, And if you will ancker vnder Fletto, then goe without the two small Rockes.

Item the course from Verdero to Elffange is Northeast and by north, and that goeth within the out Rockes, which lie within the Sisters a seaboord Roge, and keeping so right against the land you shall see a great gray Rocke, leaue that on your Larboord side, and there within lye small Rockes, leaue those on the Starboord side, & goe about by the west shore, then are you right in the narrowest of the gateor entrie, and there is good ground to ancker in, & within it is flat and soft ground.

Item from Verdero to the Graswicke within the Sisters, the course is northeast, and leaue the sharpe poynt on your Larboord side, there is good anckering, and within lyes a round Rocke, you may goe on eyther side of it, and to

the northwards of that rocke, standes a great warlocke, and there is likewise good anckering, and roome for a great fleete of ships, which tarrie for a winde: and if you will goe in, then goe alongst by the west shore, and there within lyes likewise a round rocke, leaue that on your sterebooard side, and there you may ride if you will, and the first of the entrie lyes in northwards, and after about the Iland north northeast, and then north northwest in and about the west shore.

Item, a good way without the Skiffers lyes a shippell which is likewise a good hard hauen.

Item, Walstrand lieth from the seawe East northeast, if you will saile in there, you shall see a great long Hill, keepe that same hill to the east northeast from you, and so you shall leaue the Pater Noſters on the Larboord side, and then you may see Walstrand lying before you where vpon the great Beacon or Warlocke is standing.

Item eight leagues to the eastwardes of Walstrand, lies Winne, which is a long Rock, and is small to be knowne, for there lyes at the end of it small Rockes, like as they were in three partes, and that lyes east and west from the Seawe.

Item, three leagues by east of Winne, lyes Ronsbacke and Walesound, and Midincke, lying the one of the other Northeast and southwest, and Walesound is a round Iland, and you may saile round about it at fiue, sixe, seauen or eight fatham. And west northwest from Walesound lyes a sonken rocke a small base shot from it: and then as farre from that lyes another little Rocke in sight aboue water, and there standes a Warder or marke vppon it at the west northwest end. And further vpon the maine land standes two warders or markes, those are great ones, and stand vpon the sea side, either of them vppon an out rocke a little a sunder, and there goeth in a little hauen betweene the warders: the same hauen lies east northeast from Walesound and alongst by the lowe point, you shall see Ronsback lying

north

northwards from you, and there it is verie shallowe, & you may well passe through betweene Nidincke and the maine land. it is all faire ground there, and something shallowe.

Item, the Naze of Norway lies from the Scawe west and they are distant 32. leagues.

Item, Verdero lies from the Scaw, North northwest and they are distant 13. leagues.

Item, Malestrand lies from the Scawe East northeast, and they are distant 13 leagues.

Nidincke lyes from Watersbergen southeast and they are distant fiue leagues.

Item, Watersbergen lyes from the Cole south & by east, and they are distant twelue leagues.

Item, Watersbergen sheweth as though it were an out rocke, and the land to the eastwards from Watersbergen is all plaine whole land, and Westwards it is altogether rockie.

Item, Vzeto is a high round hill, and lyes by Malestrand and westwards from Vzeto lies a long high hill.

Item, when as Vzeto lies East northeast of you, then are you right before Malestrand.

Item, Nidincke is a lowe plaine out Rocke, and lyes a league from the shore, and you may saile round about it.

Item, the Scawe Riffe and the Trendelles, lie the one from the other southeast and Northwest, and are distant 9. leagues.

Item, the Trendelles and Anold Riffe lye the one from the other southeast and by south, and Northwest and by North and are distant 11. leagues.

Item Anold Riffe and the Cole, lye one from the other, nere hand southeast and northwest, and are distant twelue leagues.

Item, the Trendelles lyes Northeast, something northerly from the wend of Lofolde, about three small leagues from the shore, and lies alongst into the sea, hard by the Trendelles: it is foure fatham deep, and on the Trendels it

it is but a fathom and a halfe, and within them it is fiue fatham deepe or thereabouts.

Item, the Scawe Riffe and the Trendelles, lye the one from the other southeast and northwest, and are distant 9. leagues.

Item, the Scawe and Waterbergen, lye one off an other East Southeast, and West northwest, and they are distant 16. leagues.

Item, when the Scawe beareth west and by south from you, and that you are a great league and more from the land, there you shall haue 37. fatham, come no nearer to the Scaw in the night, then 13. or 14. fatham, and especially when you are come from the westwards.

Item, when you are south southwest from the point of the Scawe, and that you are a great league from it, you shall haue ground there at 38. fatham.

Item, when you haue the Scawe Northwest, or thereabouts from you, and you are a league from the shore, then you shall haue 17. or 18. fatham.

Item, betweene Arnold and Waelbergen, it is in the channell 22. fatham deepe.

Item, from Lesold to Waelbergen, the course is East, and when you are east from Lesold so farre as you can well see it off the ships hatches, then shall you home no ground in 40. fatham.

Item, betweene the Scawe and Lesolde it is twentye fatham deepe and soft ground, euen hard to the Coast of Norway.

Item betwéene the Scaw and Lesolde is no hard ground, but that you haue about Yarland five, and that is hard sandy ground, and betweene Lesolde and Arnold it is all hard ground.

Item, by Waelbergen lyes a Flat of fourteene Fatham deepe.

Item, from Flattenbrowe lyes a Flat of twelue fatham deepe alongst to Brunt Holland.

Item,

Item, there lies a banke betweene Anold and Cole of seauen fatham, and sometimes the streame runnes round about and breakes vpon it.

Betweene Anold and Zeland lyes an Iland, which you may saile round about, and ride on any side of it, and the same lyes hard by Zeland, and there lies out a riffe from it towards Zeland, and towards Zeland it is hard, and towards Norway soft, and also there lies another riffe off it towards the Welt, and those bankes are very steepe too, and the Iland is called Sedero.

Item, Northeast and by north, of the norwest end of the Cole, lies an Iland called Wederor, he that will ride within that Iland, let him anker against the white Church at 7. fatham or there abouts. It is there a flat soft ground, you may saile round about it, Norwards and Southwards whether you will.

From Anold to Waesbergen, the course is Northwest & they are distant 9. leagues.

Item, when Anold is south-southwest from you there is the North end deepe, and you may saile to the Westward of the riffe 18. fatham all alongst to the sound. And if you come out of the sound with a scant wind, that you cannot keepe your course, or neere the land, then ye may ride vnder Anold.

Betweene Anold and Lesold is 7. fatham deepe, and you may saile through that waies into the Belt.

Vnder the North end of Anold you may ride at 10. or 12. fatham, and you must goe rowme of the riffe, for to goe further in.

Ye that will saile into Waesbergen, let him bring the vttermost Buy to the Northwards of the Castle, and so goe on north northeast, and take good heed, for there lies a great Rocke, euen a little vnder the water, and you must leaue that on your starreboordside, and runne so in, till you come against the Castle, and come to an anker at foure fatham or there abouts.

Item, Leselde lyes alongst south and north, and on the south end standes a long flat Church, and there lyeth a riffe of a good halfe League, and you must sayle without that riffe in fiue or sixe fatham for it is shallow, and beare Eastlyard off. And when you are out of the sound, you may then boldly sayle on, and then you must beare out Eastward againe at fiue fatham, vntill you haue brought the south end to the westward of you, and then you shall haue there 7. fatham.

Item, North and by east from Nidincke, lyes an Iland which is called Malesound you may ride within that Iland, for behinde it lies a good hauen, which is called Monkersond, and lyes North and north northeast in. And to the west northwestwardes, lyes a rocke about two or three bowshootes off. And there standes a warder or Beacon vpon it, and you may saile round about these two Ilandes before named.

Item, about 12. leagues southwest from the Naze, lyes a banke of 14. fatham deepe, and the ground is grosse red sand.

The courses from the Swine Eastward.

Item, note that Walgheren and Skeutsneffe, lye the one from the other, south and north, and are distant a hundred thirtie and eight leagues.

Item, Walgheren and the Naze, lye the one from the other south and by west, and North and by east, and are distant 10. leagues.

Item, the Naze and Bornerisse lie one from the other south and North, and are distant 95. leagues.

Item, the Naze and the Frith lie the one from the other east northeast, and west southwest distant 108. leagues.

Item, the Naze and the sands before Yarmouth lye the one

one from the other north northeast, and south southwest and are distant 112. leagues.

Item, the Naze and the Holmes, lyeth one from the other Southeast and by south, and northwest and by north, and are distant 18. or 19. leagues.

Gotlgesand lyes from Walgheren northeast, a little northerly and they are distant 16. leagues.

Holland lyes alongst north northeast, and south southwest, and he that will sayle from Gotlgesand without the Haeken, he must goe north and by east, and it is from Gotlgesand to Haeken 21. leagues.

Item, when a man comming out of the Sea doth fall with Holland so as he may see the lande, he shall know it by two steeples which stand both upon one Church which is called S. Alberts: and you may be bolde to borough by that land in eight fatham, so that you may keepe your selfe as you may get off againe with a northwest winde, for that shore is flat farre of from the land.

From the Haecken to Bornerik, the course is northeast, and are distant 12. leagues.

Wangeroge lyes from Bornerike east northeast, and is distant from it 35. leagues.

Holy land lyes from Wangeroge North and by east, and they are 9. leagues.

Item, the rifle lyes westward into the Sea from Potland, and if ye bee in 20. Fatham of the rifle, then are you to

to the ſouthwards of Naze 20. leagues off.

Bouenbergen lies from Holy land north and by weſt, and is diſtant from it 51. leagues.

From Bouenbergen to the Holmes, the courſe is north-eaſt and diſtant 10. leagues.

Bouenbergen is a long flat hill, and on the ſouth end of it ſtands a ſteeple, and to the northwards at the north end ſtands likewiſe a high ſteeple, and it is all high rough ſand-hilles alongſt towards the Holmes, and that lyes north north-eaſt alongſt.

The riffe or ſands lies out betweene Bouenbergen and the Holmes weſt into the ſea.

Item from the Holmes to Robſnot, the courſe is north-eaſt, and they are diſtant 8. leagues.

Item, at the weſt end of Robſnot, lies a banke of 12. or 13. fatham deepe, which lies 3. leagues from the ſhore.

Item, your courſe from harts Halſe to the Scaw, is eaſt north-eaſt, and they are diſtant 8. leagues.

Item, Trendell and Scaghen riffe lie one from another ſouth-eaſt and northweſt, and are diſtant 8. leagues.

Item, from Robſnot, is foure leagues to harts Halſe, and harts Halſe lies of it north-eaſt and by eaſt.

From harts Halſe to the Scaw 8. leagues.

Item, the Scaw is a low ſandy land, and Lackly is a high land, and when you come from by weſt, you may ſee it ouer the Scaw.

Item, the Scawe riffe lies eaſt north-eaſt into the ſea, a great halfe league.

Item, a great league to the north-eaſtwards from the weſt end of Leſold, lies the grounds or flats of the Trendelles, and in ſome places they are not aboue a fatham, and a halfe deepe.

Item, when you haue Leſold weſt from you, and that you may ſee it out of the waſte of the ſhipe, you ſhall haue no ground at 40. fatham.

Leſſold is a plaine low Iland, and Anold is a ragged or knotty

kontty Iland, and the riffe lies a great way off.

The Cole is a high land, and shewes it selfe in three knobs.

How to saile from sundrie places to the Scaw.

Item, he that is fiue leagues to the northward of Callis & will saile in at the riffe, let him goe north northeast something more northerly, till he come in twenty fatham of the riffe, which is an hundred and eighteene leagues off and the course is north northeast & something easterly to the Holme, and then north and northeast to the Scaw.

From the Scaw to Lesold, southeast and by east, and distant 8. leagues, and that goeth to the east wardes of the Trendelles.

From Lesold to Anold southeast, distant 8. leagues.

From Anold riffe to the Cole, south southeast twelue leagues.

Item, when you haue the Cole a great halfe league to the northeast of you, there it is 15. fatham deepe or thereabout. And betweene the Cole and Zeland it is 14. or 15. fatham deepe, and doe not venter in the night any neerer Zeland then twelue fatham. And betweene Anold riffe and the Cole, there is 20. and 23 fatham deepe.

Item, the Swine Boed lies a good way within the Cole and when you will saile into the sound, then keepe the castle of Elsenborowe without the land, and then you can take no harme there.

Lapland lies something to the northward of Elsenure, on the west side of the sound, come no neerer there then 7. fatham, and you may saile in safe.

Item the Cole and Elsenure lie fiue leagues a sunder, and the course lies from Darker, to Falterborns riffe south.

From Elsenure to Kerichol, the course is south and by east,

east, and they are distant 5. leagues.

From Dzaker to Falkerbozne rifke, the course is south and by west. And when you can not see betweene the Castell of Falkerbozne and the Church, then are you upon the shallowest of the rifke.

Item, Falkerbozne and the Woones lye the one off the other, south and by west, and nozth and by east.

Item, betweene the Woones and Falkerbozne, it is in the channell 15. oz 16 fatham deepe oz thereabouts.

Item, betweene Steeden and Falkerbozne are twelne fatham deepe in the channell, and by Falkerbozne it is shallow, and by Steeden it is thirteene oz fourteene Fatham deepe.

Item, the Woones and Steeden, lye the one from the other southeast and by south, and Nozthwest and by nozth, and they are distant 3. great leagues.

Item, Falkerbozne and Jasmount lye one from another southeast and nozthwest, and are distant 16. leagues.

Item, Jasmount and Whitmount lye one of another east southeast and west nozthwest, and are distant 3. great leagues.

Item, Whitmount and Dozneboss lye one off another south and by west, and nozth and by east, and are distant 4. leagues.

Item, Jasmount and the Woones lye one from another southeast and by east, and nozthwest and by west, and are distant 9 leagues.

Item, Whitmount and Bzontholom lye one from another, southwest and by west, and nozteast, and by east, and are distant 19. leagues.

Item, Bzontholom and Bleckilde lye one of another east and by nozth, and West and by south, and are distant 9. leagues.

The

The courſes to Miſſoude and Gripewood.

Item, the courſe from Falterborne to Jaſmount lies ſouth-eaſt, and they are diſtant 16. leagues.

Item from Jaſmount to Peert, the courſe is ſouth ſouth-eaſt, and the diſtance is 3. great leagues.

Item, from the Peert too the newe Deepe, the courſe is ſouth and weſterly, and the diſtance is 3. leagues.

Item, he that will ride by Whitmount, he may ſayle into the Wicke as farre as he will, for it is there all faire ground: when as you are a long league from the ſhore, in 14. or 15. Fatham, there is all good faſt ground, and there you are defended from a Northweſt, or North Northweſt winde, but at 7. 8. or 9. fatham towards the land it is all ſoule ſtony ground.

Item, if you do ancker at Jaſmount very neere to it it is ſtony ground, but if you do ancker at 14. fatham, there it is good chalkie or clais ground.

The courſes through the flats or grounds which are in the ſounds.

Firſt for the courſe through the grounds or flats, from Falterborne riffe to Drakes, you muſt ſaile North & by eaſt, and hard by Drakes it is 5. fatham deepe, and a little off thereabouts is the ſhalloweſt of that deepe, and there lyes the ſecond Tunne or Buy. Kaſperkney lyes in 6. Fatham or thereabouts, & hard by it, it is 7. or 8. fatham deepe.

Now, the Markes for to bring the Caſtell at Copenhauen, and the ſharpe ſteeple in one, goe directly North and by weſt to the middle Tunne or Buy according as the winde or ſtreame doſerue, you may well lie off and on vnder the Colholme. The middle marke is the Southerlieſt Mill by South Copenhauen.

Then forth to the third Tunne or Buye, the courſe is North northweſt and there lies a high hillocke, by Weſt

of

of other three hilloks, that being brought by north the towne, next to Copen hauen, there you shall haue ten or eleuen fatham. And then going forth north and by east to Elsenure, there you shall haue straight as soone as you are past the buy 7.8.or 9.fatham.

The course from Elsenure to Draker.

THe right course from Elsenure, to the grounds or flats, thwart Copen hauen and Draker is south and by east, & the distance is 8.leagues.

Then forth from Draker to Steeden, the course is south and by west, the distance 5. leagues. And betweene Steeden and Falterborne, it is 10. or 11. fatham deepe, and by Steeden you haue deepe water.

Item, the Woones and Steeden lies southeast and by south, and northeast and by north, distant foure leagues.

Item, in the channell betweene the Woones and Falenborow it is 15.or 16.fatham deepe.

Item, the Woons and Jasmount lie one of another, southeast and by east, and northwest and by west, and are distant 9.leagues.

Item, Jasmount and Whitemount lie one off another East southeast, and West northwest, and are distant three leagues.

Item, Whitemount and Borrembos lie one from another southwest and by west, and northeast and by east, and are distant 4.leagues.

Item, Whitemount and Bromthollem, lie the one from the other northeast and by east, one southwest and by west, and are distant 12.leagues.

Now

The courses from Fatterborne to Danske.

FIrſt, from Fatterborne to Wyont Hollom, the courſe is Eaſt and by ſouth, and they are diſtant 21. leagues, and Wyont Hollom lies alongſt eaſt ſoutheaſt.

Item, your courſe from Wyont Hollom to Recoll, is eaſt and by north, and the diſtance 24. leagues.

Item, the courſe from the Recoll to the Roſe-head, is eaſt northeaſt and they are diſtant 16. leagues.

Item, from the Roſe-head to Externes, the courſe is eaſt ſoutheaſt, and they are diſtant foure leagues.

Item, from Externes to Wernoord, the courſe is ſoutheaſt and they are diſtant one league.

Item, from the Wernoord to the Yerle is ſouth ſoutheaſt and they are diſtant one league.

Item, the courſe from the Yerle to the Wiſſell, is ſouth and by weſt, and they are diſtant fiue leagues.

Item, from the Mierinck of Danſke to the Wenell, the land lies alongſt northeaſt, and ſouth ſouthweſt.

Item, Lobſted is a Caſtle, and ſtandes vpon a high hill, and lies three leagues to the eaſtwards of Muinſtorowe and there is likewiſe a Mill by it.

Item, the land of Lobſted doth lie along to Wermemble north northeaſt, and ſouth ſouthweſt, and they are diſtant the one from the other 25. leagues.

Item, from Wermemble to Seuenbergen, the land lyes north northweſt, and ſouth ſoutheaſt, and they are diſtant tiuelue leagues.

Item, from Seuenbergen to Leſerort, the land lieth north and by eaſt, and ſouth and by weſt, and they are diſtant 11 leagues.

Item, Wermemble and Leſerort, are diſtant twentie, two leagues.

The courses and distances alongst the coast of Pomerland.

IN primis, from the Rose head to Sexneuis head, it is foure leagues, and from thence to Wolnesacke other 4. leagues, and then to Lida a league, and at Lida is but fiue foote water.

And then from Lida to the Recoll, you haue 7. leagues and from Recoll to Granshood foure leagues, and then forwards is a deepe bay into Jasmount.

Item, from Granshood to Sinolde, is three leagues, and there comes out a small Riuer which is called Wiper.

Item from Riuoold to Colbergen is 9. Leagues, and there comes likewise a small riuer out.

Item, Colbergen and Jasmount lye East and west, the one from the other, and are distant 19. leagues.

Item, the course betweene Jasmount and Granshood is east northeast and west southwest.

Item, the coast of Pomerland lyes alongst west Southwest, and east northeast.

The courses to saile to Reuell.

ITem, from Fosterborne Riffe, to goe by the North side of Bronthollome the course is east, and to the Northwards and are distant 20. leagues.

Item, from Bronthollome to goe to the southwards of the Goteland, the course is northeast, and they are distant 47. leagues.

Item, from Howbrough in Goteland, to Easter Gore the course is Northeast and something to the Northwards and they are distant 14. leagues.

Item, from Easter Gore to Dagerort the course is northeast northerlye, and they are distant 37. leagues, then from Dagerort to Sipiernes it is 7. leagues northeast and by east.

But

But take deepe of Sipernes, And then your coorse from Sipernes to Wodhollome, is likewise northeast and by east and they are distant 9 leagues.

Item, Wodhollome is a little lowe Iland, and lyes two leagues from the maine land.

Item, from Wodhollom to Roge the course is east northeast, and rather more easterly, & they are distant 6. leagues.

Item, from Roge to Nargen, the course is east northeast rather to the eastwards, and they are distant sixe leagues, and you must haue Nargen on your Larboord side.

Item, from Naruen to the Buye, you must goe east a great league, and you shall haue Buye on your stearebord side.

Item, you must goe from the Buye to Reuell south, and something to the eastwards, and they are three leagues distant.

How Dagerort is knowne.

The best knowledge is this: the gouernors of reuell haue made a high Tower or steeple vpon Dagerort without any Church to it.

Item, Dagerort and Hontford lye the one from the other south southeast, and north northwest, and are distant eight leagues.

Item, between Dagerort and Hontford is a great gulfe or bay, and the same is called Hondeswicke.

The courses from Dagerort to Derwinda.

The course from Dagerort to Derwinda, is north and by west, and south and by east, and they are distant 14 leagues.

Item, from Derwinda to Seuenberghen, the land lies alongst south by and by west, and north and by east, and they are distant 32. leagues.

The

The course from the Rose-head to Derwinda.

DErwinda is a Castle, and there are three small Towers vpon it, one standes in the middle of the Castle and that is the highest, and the Castle standes in Coxeland.

Item, the course from the Rosehead to Dirwinda, is Northeast and by north, and they are distant threescore and three leagues.

The thwart courses from Coreland to Goteland.

FIrst Derwinda and Castergoze lye one from another East and West, and they are distant eight and twentie leagues.

Item, Derwinda and Howbrough which is the southwest end of Gotsland, lye one from another East northeast, and West Southwest, and they are distant 44. leagues.

Item, the southwest end of Goteland and the Heele, lye one from another South and North, and are distant nine and fortie leagues.

The course from the Rose-head to Quinsbrow.

THe course from the Rose-head to Quinsbrowe, is east and by south, and they are distant 18. leagues.

Item the Heele and the Wittell of Danske, lye the one from the other South and by west, and North and by East and are distant 5. leagues.

How

The course from Bronthollom to Rie.

ITem the course from Bronthollome to Derwinda is Northeast and by east, and they are distant 77. leagues.

Leserort. Derwinda. Bacouen.

Item, the course from Derwinda to Leseroyt is Northeast and by north, and they are distant 4. leagues.

Item, the course from Leseroyt to Domesnes, is East northeast, and the distance 13. leagues.

Item and if you doe not sound, it is dangerous on Coyland side, therefore you must goe the way by your lead. And take good heede of Oessell side, for that is stony ground.

Item, you may borrow by Leseroyt in 4.5. or 6. fatham without danger, and the ground is red sand, and when you come to 13. or 14. fatham, then goe northeast & by east with Domesnes.

Item, the course from Domesnes to Rie is southeast, and something more easterly, and the distance 12. leagues.

Item, betweene Coyeland and Oessell, it is 15. or 16 fatham deep. And thwart of the Church of Oessel lies a rifke 2. leagues off from the shore, and the same rifke is called Swalneroyt, you must take heede you come no nearer that rifke then seauen fatham.

Item betweene Domesnes and Oessell it is 20. fatham and is sand or hard ground.

Item hee that will ride vnder Oessell for a Westerly winde, let him beare in till hee come in seauen fatham or thereabout, and there hee shall haue good cleane ground and good Ankerhold. And yee shall keepe the Church of

Oeffell halfe a league from you, west and by north or thereabouts. And there you shall bee well for a west southwest winde. And the point of Oeffell by west the Church whereon the houses stand, that shall beare west from you. And the Riffe lies thwart off from the Church two leagues, south by west into the Sea, and in some places it is verie nigh to the land. Take heede therefore you come no neerer the out side of that riffe then 8. fatham, for it is verie vneuen grounds and stony. And when you are at anker in the roade at Oeffell, then haue you the point of Domesnes, southest from you or thereabout, and distant three great leagues.

Also the land alongst from Derwinda to the Heuenbergen lies south and by west, and north and by east, and they are distant 11. leagues.

The thwart courses of Domesnes, Round, and Oeffell.

Item Domesnes is a Riffe, and lieth a great League from the land East Northeast into the sea, from the point.

Item, Domesnes and Round lie one from an another east and by north, and West and by south, and are distant eight leagues.

Item, Round and Ambroke lie the one from the other north west and by west, and southeast and by east, and are distant 8. leagues. And Ambroke is a little Iland, and lies a league from Oeffell and the ground about it is foule stony ground.

Also the Round and Rie lie one off another, southeast and northwest, and are distant 16. leagues.

Also Round is an Iland, and is in compasse a great league about, and you may soile round about it without danger, keeping you in fiue fatham and a halfe.

Also hee that will ride by the northeast point of Round: let him anker against the Chappell in 5. fatham, it is all clean groun

ground there. And on the west southwest side of Round, it is a faire flat land.

Now followeth the course from Round to Perno.

FIrst, from Round to Kin, the course is east northeast, and are distant 22. leagues.

Also from Kinne to Serkhollome, and from thence to Parno, the course is northwest and by north, and the distance eight leagues, and Parno lyes in the Baye of Rye bottome.

Item, Kin, Serkhollome, and Pagne, are three Ilands, and these you must leaue all on larboord side, when you saile into Parno, and at Parno standes a sharpe steeple.

Also Kinne is a lower ragged Iland, about two leagues of length, and there is soule ground about it.

Item, it is broad betweene Cozeland and Kinne, foure leagues.

Also Cozeland side is a good faire shore, and betweene Cozland and Kinne it is 10. fatham deepe, and betweene Serkhollome and Cozland is fiue fatham deepe, and betweene that and Parno, now and then lesse water: to wit, 4. fatham and three fatham.

Parno and Rye doe lie the one from the other south and by west, and north and by east, and they are distant nineteene leagues.

Item, the deapth at Parno is one fatham and a quarter.

Nowe you must take heede that by night you come no neerer to Domesnes, then 15. fatham, and hard by the vttermoste parte of the Riffe it is 17. fatham deepe, and at the vttermoste partes of Domesnes and Round, it is 24. fatham deepe.

Also Domesnes and round lye the one from the other east and by north, and west and by south, distant eight leagues.

The courses backe againe from Reuell to Dagerort.

IN primis from Hargen to Sipernelle the course is west southwest, and some thing more southerly, and they are distant 21. leagues.

Item, the course from Sipernelle to Dagerort, is south east and by south, and they are distant 6. leagues.

Item, the course from Dagerort to Eastergot, is southwest and they are distant 39. leagues. And Eastergot, lies by the south side of Gotland neere the midst of it, or rather nearest toward the east end. Gotland is a good rode for such as are bound either east ward or west ward, you may saile in all places round about that Iland.

Item, from Eastergot to Bronthollom, your course is southwest, and they are distant 63. leagues.

Item, Westergote lyes in the north side of Gotland by Wesbuy.

The course that is to be kept in sayling from Dagerort, to goe about by the North part of Gotland to Bronthollom.

FIrst the course from Dagerort to Gotsgesand, is south west and by west, and somewhat westerly, and they are distant 25. leagues.

Item, from Gotsgesand to Karelse your course is southwest and by south, and they are distant 28. leagues.

Item, from Karelse to the south point of Polland your course is south southwest, and they are distant eight and twentie leagues.

Item, the course from the southermost point of Polland to Bronthollom, is southwest, and something more southerly, and they are distant 19. leagues. And from that south point of Polland, lieth out a Riffe into the sea, a little league from the shore.

Item

Item, it is from Revell to Narghen 4. leagues.
Item, from Narghen to Narpe 1. league.
Item, from Narpe to Roge is three leagues.
Item, from Roge to Woodhollom, is 4. great leagues.
Woodhollom is a little lowe Iland, and lies a league and a halfe from the maine land.
Item from Woodhollom to Dipernelle it is 8. leagues.
Dipernelle is a high land, and there lieth out a Riffe from the land halfe a league into the Sea, and on the east syde it is flat, but on the west syde it is deepe, and is a sandy ground.

The course from Dagerort about by the north side of Gotland.

FRom Dagerort to Gotsgesand, the course is southwest & by west and they are distant 24. leagues.
Gotsgeland is a little Iland and full of Trees, and there is no habitation vpon it, and there you may choose your roade where you will vnder the land, for it is all cleane ground and faire white sand round about that Iland. It lies northy northeast from the easternmost point of Gotland which is called Fero, about 4. leagues off.
Item, there lies a riffe of sand out from that point of Fero, a great league from the land, and the same riffe is called Salue Dreins, and it is all shingle stons, and lies out from the land North and by east into the sea.
Item the point of Fero and Talkergore doe lie the one from the other south and by west southerlie, and northy and by east northerly, and are distant 9. leagues.

The deapths and soundings about Gotland and Yolland.

BEtweene Gotland and Yolland is verie vncertaine sounding, for in some place you shall haue 33. fatham, and in some other place twenty two fatham, and the ground blacke gritty stones, and some time stones as great as pea-

ſon which are blacke and earthie and, ſome time you ſhall haue 19. fatham and all blacke ſtony ground.

And when the ſouther Norden beareth Weſt off from you and that you are three leagues or there abouts from the land there you ſhall haue hard ground, and 28. or 29. fatham deepe.

Item, when you are two leagues to the weſtwards of Caſtergore, and three leagues or there abouts from the land, you ſhall haue rough ground, and one and thirtie fatham deepe.

Alſo when you are Northweſt, or Northweſt and by north from Holwbrough, which is the ſouthweſt point of Oteland three leagues from the ſhore, you ſhall haue groſſe Gravelye Sand, mingled with ſome blacke ſtones as great as beanes.

Alſo when the Chappell of Souther Norden doth lie North Northweſt, or more Northerly from you a league from the ſhore, you ſhall haue thirteene fatham deepe.

Alſo when you are North Northeaſt, or there abouts from Holwbrough 6. leagues from the land, you ſhall haue fifteene fatham, and ſtonie ground. And when you are ſouthweſt of Holwbrough, two leagues from the land, you ſhall haue twentie two fathams and likewiſe groſſe ſtonie ground.

Item, when Souther Norden beareth Weſt Northweſt from you, and are two Leagues off in the Sea, you ſhall haue there one and thirtie fatham, and hard ſtony ground.

Alſo when you are paſt Souther Norden, and are in the faire way about Clippen, there you ſhall haue hard ſlimiſh ground, and 39. fatham deepe.

Alſo from Karelſe to the South end Polland, your courſe is South Southweſt, and they are diſtant ſeauen and twenty leagues.

Item, the courſe from the South end of Polland to Bron-

Brontholloм is southwest and by south, and they are distant 18. leagues.

Item, Polland is 18. or 19. leagues long, & a great league broade, and vppon Polland all the steeples are flat, and Pollands south coast lies alongst North and by east and south & by west.

Item, from the south point of Polland, there lies out a shroed stony riffe, which is called Souther Norden, and lies out a league from the shore.

Also by west Polland goeth in Cormersound, and that way you may saile to Stoke holme, and by east Polland it is foule stony ground.

Also seauen leagues from Polland West southwest, lies an Iland which is called Clippen, you may saile round about that Iland, and it lies north northeast from Brontholloм, and is distant 16. leagues.

Item, Brontholloм and the Iland called Hanno, lie the one from the other, south and by west, and north and by east, and they are distant 11. leagues. Hanno is a high round Iland, and you may ride there if you wil, and the land lies from Hanno to Blackfit south south southwest.

Also the Castle of Brontholloме and the Earthollome, lie the one from the other west and by south, and east and by north, and are distant 3. leagues.

Item, the Earthollome and the south end of Brontholloм, doe lie the one from the other south and by east, and north and by west, and are distant 3. great leagues. And in the Earthollome there goeth in a little sound which is foure fatham deepe. This Iland is two great leagues from Brontholloм.

Item southwest and by south from Brontholloм, nine or ten leagues off from the shore, lies a riffe called the Browers riffe, which is a banke, and there is fiue fatham vpon it, & it lies alongst southeast and northwest.

Also you may saile round about Brontholloм without danger, keeping 12. fatham.

A note for riding vnder Goteland.

FIrst you shall vnderstand that great Karle & little Karle are two small high rockie Ilands which doe lie verie neere the one to the other, and they lie to the Northwards of the west part of Goteland hard by it: and for such as are bound westwards, is a good roade vnder little Karle which lies next vnto Goteland, and all is cleane ground round about it. But great Karle is not cleane ground neither on the northwest side, nor southeast side.

Item, betweene great Karle and little Karle, it is 13. or 14. fatham deepe.

Item, Karelelle and Wisbuy lie the one from the other northeast and southwest, and are distant 7. leagues.

Item, betweene Karelelle and Wisbuy lies Westergoze.

Item, take heed you come not any nearer great Karle on the other side of it, than 11. or 12. fatham.

Item, wholoever will saile into Eastergoze, comming from by west, let him passe by the first point and beare in to the other steepe point, and anker there in some 7. or 8. fatham, there you shall haue cleane ground, and betweene the Iland and the maine land it is 11. fatham deepe, and 16. fatham hard by the land.

Item, a little league by west Eastergoze lies likewise a good hauen, and it is called Sandwicke, and there stands a Chappell hard by the shoare side, and fiue leagues from thence to the westwards lies another hauen which is called Nerwicke, and fiue fatham deep, and so likewise other more, as Buiswige, and Heilicholme, and Faralound, and the Iland of Eastergoze, and doe lie one off the other south and by west, and north and by east, and are distant 9. or 10. leagues.

Item, betweene Howbrough and Eastergoze, lies a banche of 24 fatham, grosse red stony sand, and from that banke

banke you cannot see the land of Goteland out of the Top. And you have also to the Eastward thereby, another banke of thirteene or foureteene fatham, and the ground is gray or whitish sand, and when you are over that, you shall not have ground at fortie fatham.

The courses from Earthollom to Derwinda.

ITem the course from Earthollom to Dermemel is east northeast and they are distant 63. leagues.

Item, when the Rolshead beareth southeast from you, and that you are foure leagues from it, you shall have there twentie fire fatham and the ground red stones like the rifle sand.

Item, when the Role-head lies south southeast of you, being a league from it, there you shall finde foureteene or fifteen fatham, and it is white sandy ground.

Item, the Rose-head and Goteland lie one from another south and North, and are distant 38. leagues.

Item, if you come from Bronthollom being bound for Danske, and have 30. fatham deepe, you shall scant see the land out of the top and the land is great white sand.

Item, when the Rose-head beares south southeast from you, then it seemes like a saddle with two Hillocks.

Item, when the Rose-head beares south southwest of you, and that you are a little league off, there the ground is grosse white sand, and yee shall have about thirtie fatham deepe.

Item, when the Rose-head beareth West from you, and that you are a small league from the land, there you shall have small white sand, and 15. or 16. fatham deepe.

Item, when you are betweene the Rose-head and the Peele, and the east of the Peele, about halfe a league from the land, there you shall finde 33. fatham and a white sandy ground.

And

And before the Heele in the roade, you shall haue 25. fatham deeps, and blacke sandy ground.

Groundes and deapths.

ITem, the banke that is at the easter end, lying northwest from the Rocke, and the wester end of the banke that lies northwest from Haerlem, hath a swecke in the middest of the banke, in which is 12. 14. 16. or 17. fatham, and when you are at the broadest, there is 14 fatham, and then you haue the Flie east southeast from you.

The deapth and ground thwart of Ameland.

FIrst at 20. fatham ye shall haue grosse red sand mingled with some blacke sand, and shelly. And to the southward of that in 15. fath, there you shal haue small sand with shells. And for the space of the running of 4. or 5. glasses, continually ye shall haue 16. fatham, and the ground all small sand, and that is the banke or flats of Ameland.

Item, in 24. or 26. fatham north from the Skellings, there you shall haue fine white sand.

Item, vpon the Riffe from three and thirtie fatham to foure and twentie. And from three and twentie to fiue and twentie fatham, the ground is all white sand, and continueth so till the last end of foure and twentie fatham, and twentie fatham. And from twentie to seauenteene fatham is all grosse stony sand: and that is about Borkum, and where white shelles are mingled withall, and is thwart of the Skellings.

Item, at 18. fatham of the Skellings, the ground is white sand mingled with blacke sand.

Item, the ground thwart of the Flie Iland is white sand, and mingled with some redde sand, and redde shelles.

Item, at 18. fatham by the east end of the Skellings, the

the ground is fine white sand mingled with blacke seeds and small long white things like Needles.

Item, about North northeast from the Neas, there lies a sholde of fourteene fatham, and the ground is grosse redde sand, there we lay at drift three houres or there abouts, and it was still to the southwards, and then we came to foure and twentie fatham, and the ground was grosse stony ground.

Ceataine notes set downe by the Author, what his Ship did runne at sundrie time.

Item, I haue sailed from Wzontthollom to Goteland in 18. houres.

And from thence to Derwinda, in seauenteene houres, hauing a fresh continuall wind, and the Shippe being in her ballast.

Item, Carthollome and the West end of Wzontthollom, lie one from another west and by south, and east and by north, and are distant three leagues.

Item, the Castle at Wzontthollom and the Blekehue, lie the one off the other, southeast and northwest.

Item, I haue sailed out of the Flee ouer the Riffe in 28. houres, hauing a mightie and continuing wind, the Shippe being in her ballast.

Item, I haue sailed from Wzontthollom to Domelneffe, within 4. houres with a stout gale a foze wind.

Item, I haue likewise sailed within ten houres from Wzontthollom to Yetland, hauing a continuall fresh gale of winde.

Item, I haue sailed from Wzontthollome to Goteland, within foure and twentie heures, and from Goteland to Derwinda in seauenteene houres, bearing as much saile as the Ship was able to carrie.

Item, I haue sailed out off the south Perozis by Rochel

to

to Bellille in foure and twentie houres, with a reasonable gale of winde.

Item, having a verie great gale of winde I haue sailed from the Fourne to the Ile of Wight in 33. houres.

Item, I haue sailed from the Hoofden to the Scawe in 33. houres having a fresh coole of winde, which carried vs well in the running of three glasses two leagues and I haue sailed to the Riffe of Scaghen in 17. houres, and was as much as the ship could beare vp, and this was the third day of July 1574. with a laden ship.

The same third day of July, I sailed on foorth from the Scaw to thwart of the Trendelles in 3. houres.

Item: I haue with a fresh through bearing wind sailed from Flushing to Callis in ten houres.

Item, I haue sailed from the Hoofden to the Scawe in three daies carrying as much saile as the ship was able to beare, and in three daies and three nights to the Nase, which was euerie glasse a league.

Item, I haue sailed from Friburch out of the Elue to Rochel in fiue daies, and wee were two nights in the north sea, and two nights betweene the Hoofden and the Fourne, and a night betweene the Reyser or race and Rochel, with a mightie continuall winde, as much as mast and Tackle were able to beare.

Item, with a fresh through bearing winde I haue sailed from easter Penmarke to Bellille in 8. houres.

Item with such a like winde, I haue sailed from Bellile to Vse in 6. houres.

Item I haue sailed hauing a continuall great gale of winde out of the race of Fountanie to Saint Martins Iland, in twentie foure houres.

Item, I haue sailed from the south Peeretres to Bellille in foure and twentie houres, with a reasonable gale of winde.

Item with a reasonable bearing gale, I haue sailed from Bellille to Vse in 10. houres.

Also

Alſo with ſuch like weather I haue ſailed from Bellille to the Roper in 7. houres.

Alſo I haue ſailed from Saint Martins Iland to Vſe, in 7. houres hauing a great coale of winde.

Item, with ſuch a like winde I haue ſailed from Bellille to Penmarke in 9. houres.

Item, I haue ſailed out of the race of Fountany to Vſe in 22. houres, hauing but a reaſonable gale of winde and faire weather.

Item, I haue ſailed from the Fourne thwart of Portland with an eaſie gale of winde in 24. houres.

Alſo I haue with a good reaſonable winde, ſayled from the Needles in the Ile of Wight, to Saint Powles in 28. houres.

Alſo I haue ſailed from the Fourne, to thwart of the Ile of Wight in 33. houres, hauing a continuall freſh gale of winde.

Alſo I haue ſailed from Beachie to Wight in 10. houres and ſoorth to Portland in 7. houres.

Alſo I haue with a freſh winde ſailed from the Hage to thwart of Dunkirk in 18. houres, and ſoorthwith to the Hoofteden in 4. houres.

Alſo I haue ſailed from the Hage to Hoofteden in 23. houres, which was with a mighty gale of winde, as much as maſt and tackle could beare.

And I haue ſailed with a freſh large winde, from Nargen to Woodhollome in 9. houres.

Alſo with a like winde I haue ſailed from Nargen to Dageroot in 17. houres.

Alſo in the running of 28. glaſſes, I did faile from Bangeſ riffe to Scagen.

Alſo I haue with a reaſonable gale of winde ſailed from the Peertrees to Bellille in 24. houres.

Item, I haue with a reaſonable gale of winde ſayled from Bronthollom to Fokterborne Riffe in 9. houres.

Item, I haue ſailed from Elſenore to the Scrawe in 20. houres

houres, hauing but a reasonable gale of winde.

Item, Dageroot and Huntsroot lye the one from the other north northwest, and south southeast, and are distant 8. leagues.

The course through the Belt, and these leagues are to bee counted for Wekerses.

FIrst from the Trauen to Femeren it is 9. leagues, and without togoe about to Stabuy it is 10. leagues, and the course is northeast and by north.

Item, Stabuy is two leagues in length, and the course is northwest.

Item, from Stabuy to Langsound, it is 5. leagues, and the course is west northwest, and against the south end of Langland, there lies a shallow within halfe a League of Langland, you may saile betweene them both.

Item Langland is fiue leagues long, and the course is north a little to the eastwards.

Item, from Langland to Siroe it is 3. long leagues, and the course is northwest and by north.

Item from Siroe to Rins is three leagues, and the course is northwest and by northl

Item, from Rins to Sellions is fiue leagues and the course is north and by west.

Item, from Sillines to Siroe is 4. leagues, and the course is north northeast. And directly ouer against Siroe lies an Iland, which is called Wedero, from thence lieth out a Riffe or bancke, a great halfe league from Siroe, and you may passe through betweene Siroe and the same Riffe or bancke.

Item, from Siroe to Steuenshot is fiue good leagues,

and

and the course is north northwest.

Item, from Steuenshot to the Sea Buy, it is 10. great leagues, and the course is north and by west.

When you are verie nigh vnto the land, you haue no Larboord side the grounds of Yetland on which is 4. or 5. fatham, but you may not come any nearer to them. And on your Starboord lies the Riffe of Lesold, you may come within 5. or 6. fatham to that Riffe, but in the right channel is 10. or 11.

Item, when as you shall saile off from Steuens, & that you will saile ouer the sweetring, toward the Dwaell grounds, the course is north northeast 14. leagues, and then when you are com so farre, that you can see the high land behinde Seabuy, then bring that high land which lyeth behinde Seabuy, so farre northerly of you, that Seabuy may beare north northwest, and so shew it selfe cleere without the said high land.

And then saile on north northwest, and you shall haue fast ground, and if you haue then 8. 9. or 10. Fatham deepe, then are you in the right channell.

Item, from Seabuye to the Scawe is 6. great leagues, and the course is north and by east: and on your Larboord lyes a little Iland which is called the Yelmes, you must take heede of that Iland.

How to saile from the Scawe through the Belt.

The Scawe

Item, the Riffe stretches out East Northeast from the Scawe, about a great league from the Land, and you may well saile by it in 14 houres.

Item, from the Scawe to the Yelmes, the course is south

South and by west, and they are distant 4. leagues, and in the right channell is 14. or 15. fatham. and the more to the eastwards so alway is the deeper water.

Also from the Helmes to Seabuy, the course is south and by west, and they are distant 4. leagues, and against Seabuy there lies the Dwaell grounds alongst by the shore, and lie about halfe a league off from the land, if you may saile by those Dwaell grounds keeping at 7.8,9.10.11.or 12. fatham. For in the maine channell is 10. 11. or 12. fatham deepe and is fast ground,

And when the towne of Seabuy beareth west from you, then are you right against the Dwaell grounds, and East and by south from Seabuy, there lies the Iland of Lesold about three leagues off, and then leaue two third parts of the water to Lesold wards.

Lesolde

Also there lieth a riffe west off from Lesold, about a league from the land: and when you haue the Church of Lesold east from you, then are you right against the riffe.

Also when you shall saile through the Dwaell grounds to Stenens Hoofe, the course is south southwest, but and if you will leaue Stenens Hoofe on your Larboord side, then saile south and by east, and there in the right channell is fiue or seauen fatham, and soft flat ground which is called Sweetring, and you may boldly come on that side of Stenens Hoofe, at fiue fatham. But when you are within Stenens Hoofe, then you shall haue deeper water, to wit 11. 12. or 13. fatham and hard ground. And the further you are off from Stenens Hoofe Eastwards, the deeper water yee shall haue.

And

Alſo, about 3. leagues to the ſouthwardes of Steuens Hooft, lyes a little towne called Ozund buye and alongſt that runnes a quick ſand oz laneloose grounde, which is called blacke ground, and lies about halfe a league from the land.

Item, the courſe from Steuens Hooft to Siro lies ſouth ſouthealt, and they are diſtant 8. leag. And Helmes (which is a little Iland) lies off from Steuens Hooft about ſouth and by weſt and they are diſtant 4. leagues. And in the right Channell betweene Steuens Hooft and Siro, it is 11. 12. oz 13. fatham deepe and is hard ground.

And note that in the right courſe eaſt ſoutheaſt from Helme, lyes a quicke ſand ground, which is called Hattes Riffe, and it is not paſt 4. 5. oz 6. fatham vpon it, but when you are paſt that, then thenceforzth to Siro, you haue 12 oz 13. fatham deepe, and hard ground.

And this quicke ſand lyes on the eaſt ſide of the faire way, and eaſt ſoutheaſt from the ſhold lies an Iland which is called Heſlow, which lies ſo farre off that you can but euen ſee it, and you may ſaile thzough betweene Hallow and Zeland alongſt to the ſound, and about weſt from Siro lyes a little Iland which is called Medero, and there lyeth out a Riffe that ſtretches to within halfe a league of Siro, and you may ſaile thzough betweene Siro and that Riffe, and you muſt leaue two third partes of the way towardes the weſt land (that is to ſay, on that ſide the Medero is in,) and the other third parte of the water on Siroes ſide, but come no neerer then two third parts of the way oz more, which leaue on Mederoes ſide, to wit, on the weſt ſide, & the Riffe lyeth off from Medero about eaſt, and in the right channell it is 12. oz 13. fatham deepe.

Item, the courſe from Siro to Ruffenes, is ſouth ſouthweſt and they are diſtant 4. leagues. And there lyes a flat off from Ruffenes and runnes ſouthweſt off a little, halfe a league from the ſhoze, and take heede you come no neerer there then 10. fatham.

Item, the courſe from Ruffenes to Roems, is South

southeast & they are distant 4. leagues. And there lyeth a flat off from Roems, east southeast, about a third parte of a league, you may ride behinde that for a Northeast winde, and for a north and northwest winde, but you may not saile about by the westwards of Roems: hard by south of Roems lyes a little towne which is called Cartmme.

Item, from Roems to Siro the course is south southeast & they are distant 4. leag. And from the southend there lieth out a small Riffe northeast off about a quarter of a league, and Neborke lyeth west southwest from Siro, and Neborke lyes in Vaneuan tide. And there lies a little Iland west southwest from Siro, about 3. leagues distant, and is called Wrestelles, and there lies a Riffe off, and you must passe through betweene the Riffe of Siro, and the Riffe of Wrestelles. And that Riffe lieth northwest and by north from the Wrestell, and there lies a shold on the east southeast side of the channell.

Then from Siro to Langland, the course is southeast, and they are distant 4. leagues. And about west and by south of that, there lies a little Iland, (which is called Olmes,) and about 3. leagues from the North end of Langland to the northwards, there lies a Riffe northeast from Langland, about a third part of a league off. And Langland is 7. leagues long, and lies alongst south and north. And to the east southeastwards of Langland, lyes an Iland called Laland, and from the south end of Laland, there stretches out a Riffe or banke West Southwestwards about halfe a league from the shore, and to the southeast or east southeastwards, there is a shallow water, as fiue, fyre, or seauen fatham.

Item, from Laland to Fermeren the course is east southeast, and they are 5. leagues distant.

Item from thwart off Roborgherter and Femeren, the course lies west southwest.

Item from Femeren to the Crauen, the course lies south southwest, and they are distant 13. leagues.

Item, for

Item, for to knowe the markes of Lalands Riffe. First, there ſtandes a high Steeple on Laland, which ſtandes in the towne of Maſcow, when as you haue that ſteeple eaſt and halfe a point to the northwards off you, then ſhall you ſee two little round Hillocks, ſeeming as though it were two Fiſhers boates: when as you haue brought thoſe two Hillockes, and the ſaid ſteeple in one, then you are neere the Riff of Laland.

The courſe from the Moones to Lubecke.

FIrſt from the Moones to Ghelſro Riffe, the courſe is ſouth ſouthweſt, & they are diſtant two kennings, Ghelſro Riffe is a flat, and is a great leagne from Ghelſro: & Roſticke, and the Riffe lie one of another ſouth and north, and are diſtant 9. leagues.

Item, the courſe from Ghelſro Riffe to the Trauen, is ſouthweſt and they are diſtant 3. kennings. Hiſſond and Roſticks are diſtant 7. leagues by land.

Roſticke and Wiſmer are diſtant 8. leagnes by land, and Wiſmer and Lubecke are diſtant 8. leagues by land.

Item, in the channell ſailing to Lubecke it is 14. 15. or 16. fatham deepe.

How to ſaile into Wiſmer deepe.

TO ſaile in at the deepe of Wiſmer, which goeth in by the eaſt ſide, you muſt haue the ſteeple, which ſtandes on the ſouthland to the ſouthwards of you, and ſaile in ſo till you haue brought the ſteeple which ſtands on the Weſt land, neere ſe the moſte eaſterlie houſe of thoſe fiue or ſixe houſes which ſtand there, and by thoſe houſes ſtandes a tuffe of Trees togeather from the Eaſt land, and there lies out

a small Riffe, that stretches off from the Eastland North-west and by north, and when you have brought those steeples that stand vppon the Eastland, and those houses in one, then goe south southeast in, and in that deepe you shall have 14. foote water. And in the Sommer there are two tuns or Buyes lying: the one lies on the taile of the Riffe, and the other on the shallowe ground, and you may saile through betweene them.

Heere followeth farther of Wismer deepe.

Item, to saile into Wismer deepe, when you come from vp east, then beare southwest in with the west shore, till you have brought the sharpe steeple of Wismer, and the point of the east shore in one. And then hale in southeast and keepe the steeple vnder the land, and there you shall have shallow water of 4. or 5. fatham deepe, and the verie sholdest is but 3. fatham, and when you come at 3. fatham then you shall have the point or corner of the west shore west and by south from you, and after that three Fatham, you shall have againe now and then three Fatham and lesse, but doubt not, but trust to your course, and to the before written marks.

The Flouds and Ebbes from Callis in Andolozia, to Hambrough.

FIrst at Calis Malis a south southwest moone makes a full sea.

Item, at Saint Lucas a Southwest Moone makes a full Sea.

Item, you have the like tide from thence to Lisbone.

Item, all the Coast of Spaine, and Goscoine, Poitowe and Brittaine to Fonteny, it floweth a southwest, and northeast Moone.

Item:

Item, in the River of Burdeux a southwest and by west moone makes a full sea.

Item, a southwest and by west moone makes a full sea in the race of Fonteny.

At S. Mathewes a southwest and by west moone.

At Fourne a West southwest moone makes a high water.

At Aberwracke a westsouthwest, and an east northeast moone makes a full sea.

Item, in the sea before Saint Poules, an east northeast moone makes a full sea, and within the heauen of Roscow a west southwest moone.

Item, two leagues without Vshant an east or West moone makes a full sea, and the same tide keepes on to S. Poules.

Item, 9. leagues without Saint Poules it floweth west northwest.

Item, in the roade of Garneley, at west and by south moone makes high water.

Item, from Garneley to the Baskets it floweth Northwest.

Item, 6. or 7. leagues without Garneley it floweth a northwest and by north moone.

Betweene the Baskets and Portland alongst the coast northwest and by north moone makes a full sea, and seauen or eight leagues off the land, a northwest moone makes a full sea.

Item, at Dillie, an east or west moone, and in Falmouth an east and by north moone makes a full sea, & without in the sea an east and by south moone.

In Plimmouth and Dartmouth, an east and by north moone makes a full sea, and without in the sea, an east S. east moone: alongst to Portland and within Portland, an east southeast moone, and in the Race southeast, and foure leagues a seaboord, it floweth a south southeast moone.

Item, at Needles in Wight, a southeast and by south

moone. And at S. Ellens a southeast moone, and at the east end of Wight, and without in the sea, a south and by east moone makes a full sea.

Item, at Beachie a south moone, and without a south southwest moone makes a full sea.

In the Camer a south and by east moone, and in the Dowmes a south southwest moone. And without vpon the north coast of England east southeast the flood comes from by north.

The Tides of the Coast of Flaunders.

AND vpon Flaunders Coast, a south and north moone makes a full sea at the shoare and in the hauens, and without in the fayre way a Southwest and Northeast Moone.

Item in Zealand a southwest moone makes a full sea.

Item, a southwest and by south moone makes a full sea before the Mase, and within a south southwest moone makes a full sea.

Item, in the Marsedeepe, and east or west moone makes a full sea.

Item, at the Flee, a southeast and northwest moone.

Item before the Wester and easter Eames, a southeast & northwest moone makes a full sea.

Item, before the Weeser and before the Elue, and before Ankelwsen a south and north moone makes a full sea.

Item, at Hambrough, it floweth at an east or west moone.

Item, a southwest and a northeast moone makes a high water at Amsterdan.

The

The Tides ſeruing ſpecially for the coaſt of England.

The Moone ſouth or north on the landes end full Sea.

The Moone ſouth and by eaſt, at the Gore end, full ſea.

The Moone ſouth ſouthweſt betweene Holy Iland and Tinmouth full ſea.

It floweth betweene Tinmouth and Flamborough head, a ſouthweſt and northeaſt moone.

It floweth betweene Flamborough-head and Bridlington in the Bay, a ſouthweſt and by weſt moone.

The moone in the weſt ſouthweſt betweene Bridlington and Laurenas full ſea.

It floweth betweene Laurenas and Cromer, all along the well an eaſt and weſt moone.

It floweth betweene Cromer and Yarmouth roade to Layſtow north roade, a ſoutheaſt moone.

It floweth betweene Layſtow roade and Orfordnes, a ſoutheaſt and by ſouth moone.

It floweth betweene Orford and Orewell waues a ſouth ſoutheaſt moone.

It floweth betweene the Naes & the ware head of Colne, a ſouth and by eaſt moone.

It floweth at the Spittes, & at the Scaw, and all alongſt the Swinne, a ſouth moone.

At the weſt end of the Noze, a ſouth and by weſt moone full ſea.

It floweth at Graues-end a ſouth ſouthweſt moone.

It floweth at London bridge, a ſouthweſt moone.

It floweth at the North-land, a ſouth ſoutheaſt moone, & ſo alongſt the coaſt till you come to Beachy: and in the Offing from the north Foreland to the ſouth Foreland, it runneth halfe tide. And from the ſouth Foreland to the Naes to Fairely, it runneth halfe tide. And from Fairely to Beche, it runneth quarter tide vnder other.

It floweth to the westward of Beche, a kenning a south-east and by south moone.

It floweth at Portesmouth, a south and by east moone.

It floweth at S. Elins a south southeast moone.

It floweth on the sea side of the Iland a southeast and by south moone, and so on the land and the Needles, and runneth quarter tide in the Offing.

It floweth at Poole in the hauen, a southeast moone.

It floweth at Waymouth, and east and west moone.

It floweth at Portland, a southeast moone.

It floweth from the west part of Portland till you come vnto Plimmouth and east and west moone.

It floweth on the shore from Plimmouth to the Lizard, a west and by south moone, and in the Offing a southeast moone.

It floweth at Mount Bay, an east and west moone.

It floweth at Silly: a west and by south moone.

It floweth at the Lands end of Goolfe: a west southwest moone.

It floweth all alongst the coast vp to Bristow, and the coast of Ireland from Waterfoord to Kinsale, a west and by south moone.

Furthermore, it floweth (for the most part) from the Poole head of Burdeaux, all alongst the Coast of Biskey Galiza, Portingale, till you come to the straights of Maliga a southweast and northeast moone.

It will flow a point of the Compasse more in the Spring tides then in the neap.

It floweth at Flushing a southwest and by south moone.

It floweth at Antwerpe an east and west moone.

It floweth all alongst the coast of Flaunders from the Wildings to Callis, a south and by east moone: and runneth halfe tide vnder the other.

Now heere is one speciall thing to be noted, and that is this: it floweth one point of the Compasse more in the Spring streames, then it dooth in any of the quarters of the moone, (so that it bee a riuer where there is any indraft hauing distance from the sea) when there is neither

rage of winds, nor any cause either to hinder or further the said effect.

Tides in a riuer that hath any distance vnto the sea.

As for example, thus: it floweth at Graues-end at the change of the moone or full, a south southwest moone, but in any of the quarters of the moone, it scant floweth, a south and by west moone: and this is generall for euer.

The markes to goe by the east, and of the Flee hard aboord the shore.

ITem, your markes to goe into the Souther sea, by the east end of the Flee, being to the westwards of it, you shall see two Beacons which stand on the east end of the Flee, you must keepe them both together, vntill you come within 4. or 5. fatham of maine, and then you shall haue sight of the first Buy, which ye must goe withall: and being at the first Buy, you shall goe in alongst by the shore with the second, in three fatham, for it is not much deeper in that channel: you may leaue the Buy on which side you will. And as you draw neere to the east end of the Flee, you shall come to 7. 8. or 9. fatham, but take heed you come not too neere the Flee, for it is there as you Looffe in verie steepe: therefore you must giue the point a pretty bearth, going vp in 4. or 5. fatham, vntill you come to the Buy, which you shall see to the south southwestwards of you, which you must leaue on your Larboord side, and so goe vp alongst by the Flee, vntill the Beacons begin to come together, where you may anker in 4. 5. or 6. fatham as you thinke best.

The markes to goe in at the west gate by the Flee Iland of Skelling.

IF ye come out of the Sea, & meane to goe in at the wester Gate by the Skelling, you shall see a Beacon stand vpon the West end of the Skelling, hard by the Tower, you must runne in with the maine, keeping the Beacons of

the

the Flee together, vntill you ſee the foreſaid Beacon and Tower in one, and thus you ſhall finde the firſt buy, which you muſt goe in by, and ſo goe in from it vntill ye come to the other, your leaſt water in this deepe will be 3. fatham, and thus going in from Buy to Buy, you ſhall come into the norther gate, and then you may goe vp in that deepe by thoſe Buyes, your courſe is then ſouth and by weſt, next hand.

The going in at the Norther gate.

IF you come out of the ſea, and will goe in at the norther gate, looke for a great Beacon that ſtandeth vpon the weſt end of the Skelling, to the eaſtwards of the Tower by the ſea ſide, and thus hauing the Beacon and the Tower together, you ſhall finde the firſt Buye of this gate which lies in three fatham at the leaſt. Leaue it on your Starboord ſide, and goe next hand ſouth in with the next Buye, leauing it on your larboord ſide: to the nert goe in ſouth and by weſt, and leaue that alſo on your larboord ſide: with the fourth Buye goe ſouth ſouthweſt.

How to goe in with the weſter Eames.

COmming out of the ſea, to goe in for the weſter Eames, if you will looke out for the firſt Buy, you ſhall ſee it when you haue brought the Boſſe ſouth ſoutheaſt of you, the ſecond Buy lies from the Boſſe ſouth and by eaſt, the third Buye is from that ſouth: the fourth is ſouth and by weſt: e theſe Buyes doe lie eaſt and by ſouth, and weſt and by north one of another, and by this you may know what Buye you goe in withall.

The courſes from Hedland to Hedland about Iſland.

ITem from Ynge to Marchant Foreland, the courſe is weſt fifteen leagues, and betweene them is the Buy called Portland Buy, and a league to the weſt wards of Ynge is an Iland called Ynge Iland, and lieth not a league from the maine.

Item, from Marchant Foreland to Weſtmonie, the courſe is weſt and by north 12. leagues, and to the north-

weſt

westwards of Westmonie is a Bay, wherein is a Harborough called Orbeg, and the eastwards of Westmonie lies two Ilands, the one called Risbell, and the other the Scatter, and they lie not two leagues from that hauen, and the southwards of Westmony there lieth also three or foure Ilands called the Gant Ilands, and the vttermost of them lieth 4. leagues of the maine.

Item, from Westmony to the Roke the course is west northwest, 16. leagues, and three leagues to the eastwards of the Roke is a hauen called Genswicke, and at the point of the Roke lieth two Ilands, called the Ganet Ilands, and they lieth three leagues of the Roke, to the west southwestwards.

Item, from the Roke to Snokfall foot, the course is north northwest twelue leagues, and betweene them is Hamford Bay, in the which goeth in two soundes, the one is Hamford and the other is called Reblewicke, and in the south part of the Bay, is Rollimers Nesse, and the northpart is Snakfall foot, Rollimers Nesse, and the northwards of the Rocke fiue leagues, and Botsum hauen is to the northwards of the Rocke three leagues.

Item, from Snokfall foot to faire Foreland, the course is north 11. leagues, and betweene them is a great Bay called Snokfall Bay, and 3. leagees to the northeastward of Snokfall foot in the Bey is a hauen called Gamlike.

Item, from faire Foreland to Kettle Bay point, the course is northeast sixteene leagues distant, and betweene them in the Bay are these soundes, the next to the Foreland is called louste Bay, and is there three leagues off, and to the northeast of it is Anderkker, and the next Mereker, next Northerkker, then Piggos Holl, and Soundikker, which is a sound that is two leagues ouer: in that sound is a good harborowe called Scottelkker, and an Iland called Blunt Island.

Item, from Kettlebay to the Rag, the course is Northeast and by east fiue leagues distant and betweene them

are

are these Baies. First Kettle Baye, then Floudon Bayer next Wolfe Bay, and then the rag Baye.

Item, from the Ragge to sound riall point, the course is east northeast twentie leagues, and betwixt them are these Bayes and sounds, there is a Bay sixe leagues to the eastwards of the Ragge called the orgen Bay, & the easter point of that Baye is called the Orgen point, and that is the west point of a sound called Langerdall, and within that sound is a Harborough called Stingarffer, and the east point of Langerdall is called Shell Nesse, and it is betwixt both points eight leagues, and to the eastwards of Shell Nesse is a sound called Calkerffer, and in the mouth of that sound there are two Ilands, the one is called the Barnard and the other the Scate.

Item, from sound Riall point to Simbernesse, the course is northeast ten leagues, and off the mouth of sound Riall lies an Iland called Gremsie, next sound Riall is flat and Flatstrand Bay, next is Oxenfer and, it is betwixt it and Simbernesse 25. leagues.

Item, from Sibermnesse to Langnesse, the course is east and by north 12. leagues, and betwixt them is a blacke Bay.

Item, from Watlingfer point to Sillie, the course is southwest 20. leagues distant, and betwixt them is Strond Bay and Watlingfer.

Item from Watlingfer point to Sillie, the course is south west 15. leagues, & these are between them. First Rose Bay, Southerfer, and then Red-cliffe, next Sillie and in the mouth of Sillie is an Iland called Sillie.

Item from Sillie to the Horne, the course is west southwest 30. leagues off, and betweene them is first Dof-house, Rocke Baye, Prie Bay, Gooderwicke, next Pappe Iland which lieth halfe a league from the shore, and off Dof-house lies a Rocke fine Leagues off the shore, called the Wheles backe.

Item from the Horne to Ynge, the course is west and by south sixe leagues, and betweene them is Ynge Bay.

Breefe

Breefe Notes of Saint Georges Channell.

NOw first from S. Denis head in Wales, to the Calfe of Mann is 37. leagues, and at S. Denis head it floweth east and West halfe tide, and at the Ile of man it floweth southeast, and the sound runneth to the Northeastwards.

Item, from the Calfe of Man to the mouth of Galloy, the course is north and by E. and they are 12. leagues distant.

Item, from the Mouth of Galloy, to the mouth of Kinter, the course is N. northwest, and they are distant 20. leagues.

Item, the mouth of Kinter and the sound of Ellye lye the one from the other, north northwest, and south southeast, and are distant 12 leagues.

Item, the Mouth of Kinter and Carles Ile lyeth south and north, distant five leagues, and it floweth there northeast.

Item, betwixt Carraway and Connock Ile, it is five leagues.

Item, betweene Connocke and Dentram five leagues and it floweth there southwest and by west.

Item, betweene Dentram and the sound of Ellis it is five leagues.

Item, betweene the small sound and Dolwyet it is foure leagues, and it floweth there west southwest.

Item, betweene Dolwyet and Lasternel is two leagues

Item, betweene Lasternell and Abermoricke, is foure leagues and it floweth there east and west.

Item, from the mouth of Kinter, all the sound alongst, until ye come to the Lough against Abermoricke, the flood runneth to the northwards, and from the great Lough to the northwards, the ebbe setteth out West and the flood east, till ye come to the sound of Moule.

Item, from Abermoricke to Rowre Kemoy, the course is

is east south east two leagues.

Item, from Rowbzie Memorye, to Kittles Croffe, the course is north northeast 14. leagues, and it floweth there east and by south.

Item, betweene the Kittles and Hacknelles Castle, is two leagues, and it floweth a seaboord Hacknelles Castle a Northwest and by west Woone, and the floud runneth there to the Northwestwards, and the ebbe to the southeast.

Item, from Hacknelles Castle to Seale Iland, the course is west northwest, and they are distant two leagues, and there is a verie good roade in the east southeast side of the Seale Iland.

Item, from Seale Iland to Rowre, is tenne leagues, and the course is North and South, there the floud runneth to the southwards, till you come to the northwardes of Lobcarim, and it floweth there northwest.

Item, from Rowbzie to Faire head, the course is north and by east thirtie leagues, there the floud runneth alongst the Coast to the Northwards, and the ebbe to the Southwards.

Item, Faire head and Holborne head, or Catnesse, lye East Northeast five leagues distant, and there it floweth a southeast and Northwest Woone, and the floud sets to the northwards.

Heere followeth the course from Woods Hollom vp to the Narue.

Item, from Woods Hollome to the Ile of Margen the course is east northeast five Leagues, and there lyes a Rocke east northeast from it two leagues off. At this Iland ye may see Reuell Steeple east southeast from it about tenne or twelue miles.

Item, from the Ile of Margen, to the Ile Vogland on Finland

Finland ſide, the courſe is eaſt northeaſt 26. leagues, and from Nargen ouer to Finland ſide, it is not paſt 8. or nine leagues, and all the ſaid coaſt of Finland, is full of rockes and dangers.

Item, from the Ile of Vogland to the Ile Tuto, the courſe is ſoutheaſt 4. leagues, and with that courſe ye ſhall goe to the weſtwards of Tuto.

Item, from Tuto to the Narue, the courſe is ſoutheaſt & by eaſt 8. leagues, but in going from Tuto to the Narue-wardes, ye muſt hale ſoutheaſt, or ſoutheaſt and by ſouth to goe cleere of the ſholdes on Rofland ſide, the Latitude of the Narue is 60. degrees and 10 minutes.

Item, from the Narue roade the land lyeth weſt, vntill ye come as farre as Reuell, it is a faire Coaſt to ſaile by, and better paſſing by it then by Finland ſide, or by Vogland, except the winde be northerlye.

Item, there is an Iland weſt 12. leagues from the Narue, called Cartholom. The ſaid Ile is 2. miles from the maine, there is good roade about it. Alſo there is an other Iland betweene Cartholom and the Narue roade, that is but 8. leagues weſt from the Narue, and there is a good roade about it, there is the caſtle of Keyſorow by it, and on the Northſide of it is a great ledge of Rockes called the Wrangles, they lie in the middeſt of the Sound, therefore beware of them.

A briefe way to ſhift the Sunne and Moone by memory.

Firſt, ye haue to conſider, that although the moone haue properly but 29. daies 12. houres and 44. minutes from Coniunction to Coniunction, yet in ſhifting the Sunne and Moone for knowing the tides, it ſhall not bee hurtfull to giue her 30. daies iuſt, onely to auoide fractions, or broken numbers in the vſe therof, for ſo ſmall is the error that groweth thereby, that it is not to be accompted in any one tide, to bee any annoyance to the Mariner.

Further,

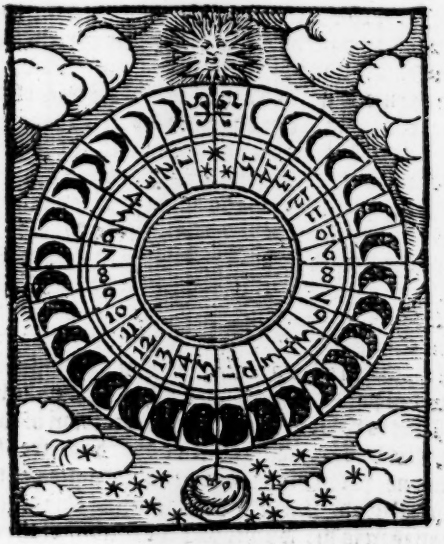
Furthee, you haue to note that the 32. pointes of the Compasse containe in this vse 24. houres of times, so that euerie poynt is full ¾ of an houre. or 45. mi. and euery 24. houres the Sun and Moone depart the one from the other 28. minutes which is iust a point and 3 minutes more. And being 48. houres or two daies old, they are two pointes and 6. minutes apart, and after this manner for euery day of her age ye must adde to their apertiment 1. point and 4. min. vntill she come to the full or 15. dayes olde. And also yee shall note that from the change to the full, she riseth by day and hath her hornes to the eastwards: and from the full to the change hath her hornes to the westwards, so that alwaies her hornes are turned from the Sunne, and also at the full she is directly against the Sunne, as appeareth by the figure following on the other side.

* This is to be vnderstood when the Moone hath no Latitude, but is iust vnder the Ecliptick line, for otherwise whē the M. hath her greatest N. or So. Lati. she wil differ for the moste parte more then half a point and sometimes an whole point & more frō the Suns oposit point in such places as be farre towards the North or South.

And likewise ye shall note, that continually at the instant of the full, the moone riseth at the present time, that the Sun goeth down in the opposit or contrary point, & therefore those that hold opinion that the moon alwaies riseth at the quart. at 12. of the clocke at noone, and at the full at 6. of the clocke at night, they are much deceaued. For if the sunne set at 4. of the clocke in winter, he goeth neere the southwest and by west, the moone being then at the full in Cancer must needs rise at northeast and by east, at the same present houre that the sunne setteth. And as many are deceaued in this point, so are there also many mistaken; and often times greatlye anoyed in an other point, and that are those that vse in going with any barde harborough shold, or land, to set the moone by the compasse, to knowe the time of the full sea in any place, and this is surely a dangerous practise. For if the moone be in northy signes as in Gemini or Cancer, and that he seeke the full sea on the East, or East Southeast, then by setting the Moone by the compasse, to knowe the full sea he may misse almost 2. houres of his tide, and thereby come to a great annoyance, and knoweth not how nor by what meanes it chanceth. Therefore let euerie man that shall stand in need of this

of this rule, practise the vse thereof by memory, which is more commendable then Tables, but if their capacities serue thē not to do it by head, then I wish them to vse rather such tables as are extant for that purpose, vntill they are otherwise able to doe it by memory. For as the Compasse lying in all places horizontally, is imperfect to the shew the true apertiment of the Sun & Mone in the Zodiake, so likewise by the imperfection, the Compasse is at no time a true Diall to shew the houre of the day, except for the instant time of the midday or direct ly vnder the Poles of the World, where the Equinoctiall or in the horizon, or els in the Equinoctiall pointes, except the flee of the Compasse be lifted vp as the Equinoctiall is eleuated in the Latit. where the observation is made. And this is most found in summer-time, when the Sunne is in north signes, as in Cancer or Gemini, at which time it is almost 8. of the clocke, before the Sunne come to the east point of the Compasse, yet it is commonly counted with many that an east Sunne by the Compasse is alwaies 9. of the clocke in the morning, and a west Sunne to be 6. of the clocke at after noone, and so consequently for all the other points of the Compasse. But all this error commeth by the Horizontal lying of the flee of the Compasse as I before haue said. And because the imperfection of the Compasse is cause of the error in reckoning the tides, by setting the ☽ with it by the eye, therefore I wish no man to vse it to that purpose, but to reckon their appertiment by memory or by Tables as I haue before said. And further heere is to be noted that the common Compasse being set ½ a point to the eastwards of the true meridian of any place, as some Compasses are almost a whole point, then I say by that Compasse where the North point so varieth from the true meridian of the place, so much shall it be vncertaine to finde out the houre of the midday or noone, yet many makes not observation of the Suns meridian Altitude, vntill he be at south by this varied Compasse, and then is the Sunne past the instant of the meridian, and his Altitude somewhat decreased. And the more the

Compaſſe is varied to the eaſtwards, themore ſhall the Sunns Altitude be decreaſed when he is come to that point. And as the ſouth of the Compaſſe doth make difference from the true Meridian in the Horizon, ſo doth all the other points in like proportion from their propper place. And as the varying Compaſſe is the onely impediment hereof, ſo is it likewiſe being varied, imperfect to know the appertinent of the Sun ☉ Moone by the point ſhewed in the Horizon. Therefore for the eaſier underſtanding of the willing learner, I haue hereafter ſet downe in plaine ſort a Compaſſe Flee, and the manner how to knowe the appertinent by memorie: how many points and minutes the Sunne ☉ Moone ſhall bee a part, for euerie particular day of her age.



The order of your compasse: that is, to know your points both with the Sunne, and against the Sunne, beginning at the north point, as hereafter followeth.

North, north and by east, north northeast, northeast and by north, northeast, northeast and by east, east north east, east and by north, east: east and by south, east southeast: southeast and by east, southeast, southeast and by south, south southeast, south and by east. South: south and by west, south southwest, southwest and by south, southwest, southwest and by west, west southwest, west and by south, west: west and by north, west northwest, northwest and by west, northwest, northwest and by north, north northwest, north and by west, north.

Thus it is said with the Sunne, and as here followeth against the Sunne: north, north and by west, north northwest, and so forth contrariwise.

And thus must you learne to say your Compasse, both with the Sunne and against the Sunne.

Now when you haue learned your Compasse with the Sun, and against the Sunne perfectly, you shall learne to bring 32. to 24. as hereafter followeth.

Here is mentioned before, your Compasse wherein are 32. points, also you haue to euerie point 45. minutes, and to your 32. pointes are 24. houres, and to your 24. houres there are 1440. minutes, also your 32. pointes are not an houre a peece, for they lacke 15. minutes a peece of an houre. Also you shall take out of your 32. points 8. pointes, so there resteth behinde 24. pointes which 24. pointes must bee brought into 24. houres: you haue mentioned heere before your Compasse, wherein are 32. points. Also you haue heere mentioned your 24. points, and also your 8. points. Now for to bring your 24. points to 24. houres, you haue to euerie one of your 24. pointes, 45. min. a peece, and so they lacke

15. minutes a peece of an houre. Now for to make the 24. points 24. houres, you haue 8. points which you did take out of your 32. points: also these 8. points must be parted into 24. the 14. parts to make points 24. houres. Also you haue to euerie one of your 24. points 45. minutes the which 45. min. is three quarters of an houre. Also you haue to euerie one of your 8. points 55. minutes a peece, and to your eight points there is 6. houres and to your 6. houres there is 18. score minutes these 18. score minut. must be parted into 28 parts, and to euerie part 15. min. And when your 11. score min. are parted, giue to euerie one of your 24. points 15. min. & that shall make euerie point an houre, for 25. minut. and 15. min. makes threescore minutes, and threescore minutes are an houre, and so your 24. points are 24. houres. So that 8. points, make the 24. points 24. houres and 32. points 24. houres. And so giuing to euerie 4. points 3. houres through your whole Compasse, in your 32. points 24. houres, and you haue to the 24. houres 1440. minutes, and this is called the bringing of your thirtie two points to 24. houres, and your 32. to twentie foure.

This rule of bringing 32. to 24. or any other number of points, giuen to the number of houres contained in them, may easilier be performed thus:

As 3. is to 4. so is the number of the points giuen to the number of houres contained in them. Wherefore multiply the points giuen by 3. and deuide the Product by 4. for so the quotient shall be, the houres sought for.

As for Example.

If you would know how many houres 13. points of the Compasse will make, multiply 13. by 3. the Product shall be 39. which being deuided by 4. the quotient giueth you 9. houres and three quarters.

Particular

Particular notes from the change to the full, to knowe how many pointes and minutes the Sun and Moone are a part, during which time the Moone ſeemeth by the courſe of the diurnall *motion to be behind the Sunne: neuertheleſſe by her proper motion in the Zodiacke, being ſwifter then the Sunne, ſhe goeth continually before him, vntill the inſtant of the next coniunction or change.*

FIrſt at 1. day old, the Sunne and Moone are one point & 3. minutes a ſunder, and the Moone to be behinde the Sunne to the eaſtwards, and ſo vnto the full.

At 2. daies old, they are 2. points and 6. minutes a ſunder.
At 3. daies old, they are 3. points and 9. minutes a ſunder.
At 4. daies old, they are 4. points and 12. minutes a ſunder.
At 5. daies old, they are 5. points and 15. minutes a ſunder.
At 6. daies old, they are 6. points and 18. minutes a ſunder.
At 7. daies old, they are 7. points and 21. minutes a ſunder.
At 8. daies old, they are 8. points and 24. minutes a ſunder.
At 9. daies old, they are 9. points and 27. minutes a ſunder.
At 10. daies old, they are 10. points and 30. minuts a ſunder.
At 11. daies old, they are 11. points and 33. minut. a ſunder.
At 12. daies old, they are 12. points and 36. minut. a ſunder.
At 13. daies old, they are 13. points and 39. minut. a ſunder.
At 14. daies old, they are 14. points and 42. minut. a ſunder.
At 15. daies old, they are 16. points and iuſt a ſunder, the one directly againſt the other, and then is the moone at the full, vntill which time ye muſt reckon the moone alwaies to be ſo many points behind the Sunne, as is aboue expreſſed.

The apertiment of the Sunne & Moon, from the full vntill the change: in all which time the Moone is to be rekoned before the Sunne.

ITem, at 16. daies old, the Sunne and Moon are 14. points and 42. minutes a sunder, the moone seeming to be before the Sunne to the westwards.

At 17. daies old, they are 13. pointes, and 39. minutes a sunder.

At 18. daies old, they are 12. points and 36 minutes a sunder.
At 19. daies old, they are 11. points and 33. minuts a sunder.
At 20. daies old, they are 10. points and 30. minut. a sunder.
At 21. daies old, they are 9. points and 27. minutes a sunder.
At 22. daies old, they are 8. points and 24. minutes a sunder.
At 23. daies old they are 7. points and 21. minutes a sunder.
At 24. daies old, they are 6. points and 18. minutes a sunder.
At 25. daies old, they are 5. points and 15. minutes a sunder.
At 26. daies old, they are 4. points and 12. minutes a sunder.
At 27, daies old, they are 3. points and 9. minutes a sunder.
At 28. daies old, they are 2. points and 6. minutes a sunder.
At 29. daies old, they are 1, point and 3. minutes a sunder.
At 30. daies is the Coniunction of the Sunne and Moone.

Now when you knowe by these Rules before shewed, how many pointes the Sunne and Moone are apart, and whether the be before or behinde the Sunne, then is it easily knowne by the course of the Sunne, the houre & minute when the Moone shall come vpon any point of the compasse, where ye desire to knowe the houre of the full sea, according to her age, as hereafter followeth to make it plaine by example.

When

An Example.

WHen the Moone is 10. daies old, I desire to knowe at what houre she commeth to the south southeast to make full sea at Callis, or in any other place where it floweth on that point? I say then 10. daies of her age sheweth her to be 10. points, and three times ten minutes from the Sun and behinde him. Now for seeking of the houre of the ful sea, the moone being at south southeast, you must reckon the Sunne to be 10. points, and 30. minutes before her to the westwards, which falleth on the west point, and 30. minuts to the northwards. And therefore the Sunne being on that point, and 30. minutes to the northwards of the west, I say the full sea shall be at fiue of the clocke and 30. minutes at Callis, and in all other places where a south southeast moone makes a full sea.

Another Example.

WHen the Moone is 18. daies old being before the Sunne I desire to know the houre of the full sea, where an east moone makes a high water. I consider that the moone being but 18. daies old, there is yet 12. daies of her age to come, which sheweth the moone to be 12 points, & 36. minutes from the Sunne, and before him, the moone then being at the east and the Sunne must be 12. points and 36. minutes behind her, which is at northwest and 36. min. to the west-wards. So the full sea where it floweth east or west, and the moone 18. daies old shall be at 8. of the clocke & 24. minutes. And that by this computation is easily found in all places, and vpon euerie point of the Compasse, the time of the full sea or high water, the age of the moone being knowne as is before declared.

How to knowe the houre of the night by the Gwards, by knowing on what point of the Compasse they shall be at mid-night, euery fifteenth day throughout the whole yeare.

First you must vnderstand, for the certaine knowing of the points of the Compasse, that North is alwaies to be vnderstood, directly vnder or aboue the North starre, and south vnder east, as you behold the starre to the right hand wards: and West to the left hand: the Gwards seeme to goe against about the Sunne lattrally, comming from east to north, and from north to west, and from thence to the south, and so round euerie three moneths of the yeare, occupying one quarter of the Compasse as followeth.

Januarie, Februarie, and March, occupie the northeast quarter.

Aprill, May, June, the northwest quarter.

July, August, and September, the southwest quarter.

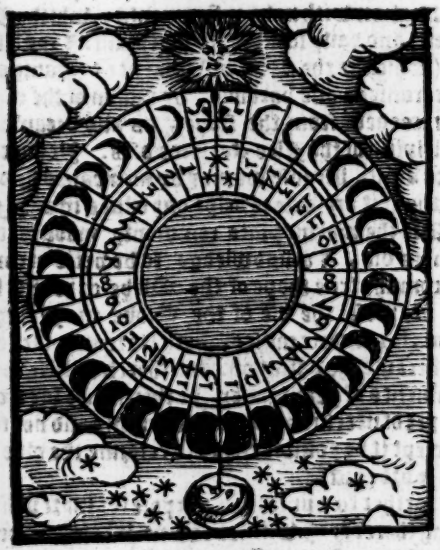
October, Nouember, and December, the southeast quarter.

And although I haue onely shewed the houres of the night by Gwards or little Beare, yet the like also is to be knowne by any other notable fixed starre that is neere the Pole, because the fixed starres contained within the constellations kepe alwaies one equidistant motion from the Pole, without any great varietie, mooving alwaies about the Pole, in 24. houres, euerie one in his proper Circle, according to the diurnall motion. So that by the point or place considered that they occupie euerie month at mid-night, may also easily be knowne the other houres of the night, in reckoning

euerie

euerie point to be of three quarters of an ho. of time. And although in this rule for the houre of the night, by the Gward, there be foure imperfections or error, growing by our view, being vpon the face or superficies of the earth or water, yet so small is the error and so great the benefit of the houre of the night, that I haue rather thought it necessarie to set down it with that error, then to omit it and lacke the benefit and vse thereof. And here I haue occasion giuen me somewhat to speake of them that haue written against Mariners for their grosse iudgements and erronious rules, promising generall reformation with new instruments, which I long haue desired, and daily looke for to see ertant: I confesse the Compasse (which is the chiefe instrument of Nauigation) to be most erronious and variable, by reason of the naturall propertie receaued from the stone, as also because of the Horizontall lying of the Flee, for some vses. Yet necessitie caused vs to vse it, because we may by no meanes finde better, nor without it are able to helpe our selues in any Nauigation. Also the marine plats commonly made for the sea and Mariners vse, I acknowledge to be verie erronious, and farre from the true shape of the Globe or round bodie: yet I may not prefer the vse of the Globe in Nauigation before them, for sundrie causes, both for want of true courses as also because the variation. And therefore all such rules, and instruments of Nauigation, be they neuer so erronious and false, yet of necessitie they are tollerable and not to be omitted, except it be possible either to reforme the olde, or to make new more exact.

Now further to our former purpose for more plaine vnderstanding thereof, I will set downe where and on what point of the Compasse the Gwards are found at mid-night, euerie 15. daies through the whole yeere, as here after followeth, and for the better vnderstanding, I haue here set the Flee of the Compasse, with all the points present.



Where the Gwardes are at midnight, euery month in the yeere.

I. The 15. day of Ja. the Gwards are at east at midnight.
The end of Ja. east and by north northerly at midnight.

F. The 15. of Febrnarie at northeast and by east at mid.
The end of Febrnary at northeast at midnight.

M. The 15. of Mar. at northeast & by N. northerly at mid.
The end of Marc. north & by east easterly at midnight.

A. The 15. of Aprill north at midnight. (at midnight.
The end of Aprill the Gwards north & by west westerly

M. The 15. of May at northwest and by north at midnight.
The end of may at northwest and by north at midnight

I. The 15. of June northwest and by west Guards at mid.
The end of Ju. at w. & by N. Northerly Guards at mid.

I. The 15. day of July at west Guards at midnight.
The end of July at west and by south southerly at mid.

A. The 14. of August at southw. & by west westerly at mid.
The end of August the Gwards southwest at mid.

S The 15. of Sept. at southwest & by So. southerly at mid.
The end of September at south & by west westerly mid.

O The 15. of October a south Guard is then midnight.
The end of October at south & by east, easterly midnight.

N The 15. of Nouemb. at southeast & by S. southerly mid.
The end of November at southeast, then it is midnight.

D The 15. of Decemb. at southeast & by east easterly mid.
The end of December at east & by south southerly mid.

Note

Now when you know on what point of the Compasse the Gwards are alwaies at mid-night, then may yee by it also knowe the houres before or after mid-night, alway reckoning for euerie point that they shall lacke of the mid-night point three quarters of an houre, and for euerie point that you shall finde them to be past the mid-night point, likewise three quarters of an houre, as for example.

Example.

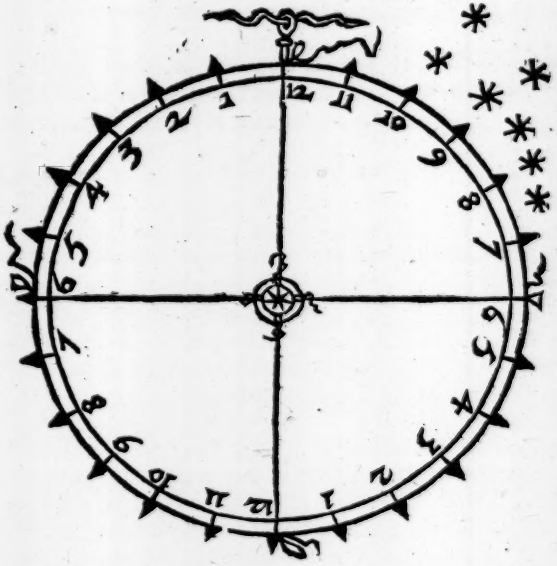
THe 15. of Januarie the Gwards are at east at mid-night, if then you finde them at southeast, which is foure points short of the east, that weyt it to be foure times three quarters of an houre before mid-night which is nine of the clocke in the euening.

If you finde them past the east point, looke how many points they are past, so many times three quarters of an houre is it past mid-night: and this is a generall rule for euerie month in the yeare. If the verie same day of the month be not here expressed, which you shall then occupie, then take the middest, or the end of the same month that is next vnto the same day, and so the error cannot be great.

The houre of the night is also knowne by the Gwards or any other starre neere vnto the north Pole, by diuers sorts of instruments made to that vse, some deuided as the Compasse into 32. points, thereby reckoning 3. quarters of an houre for euerie point: others deuided into 24 houres, as this instrument following, which is to be made of a hoope of mettall deuided into 24. houres, euerie houre hauing a little pin, that it may be felt in the night when it cannot be seene, to number the houres. This hoope being deuided into 4. equall parts, ye shall make fast a thread to euerie quarter thereof, and the other 4. endes of them shall be fastned to a ring in the middest of the instrument, through the which ye shall see the north starre. And thus holding it verie vpright, & of a

reasonable

reasonable distance from your eye, ye shall haue the Wards directly with the pinnes in the Poope, at such houres as is numbred vnder the pin. But it is necessarie that ye know by memorie (as I haue before shewed) what point those stars shall bee on at mid-night, and thus it serueth for any starre neere the Pole.



LONDON.
Printed by *E. Allde.* for *Iohn Tap*, and are to be solde at his Shop, at the corner of Saint *Magnus Church.*
1612.

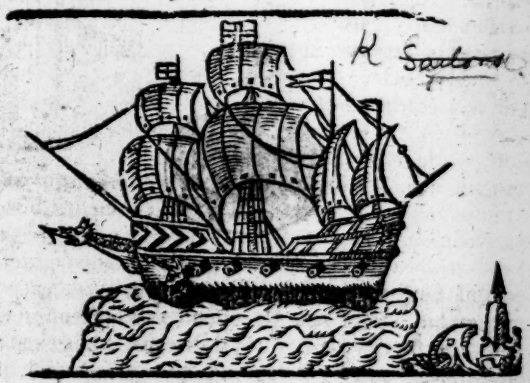
UNIVERSITY LIBRARY CAMBRIDGE

¶ The Safegard of Saylers, or great Rutter.

Containing the courses, Distances, Soundings, Flouds and Ebbs, with the markes for the entring of sundrie Harboroughs both *of England, France, Spaine, Ireland, Flanders, and the soundes of* Denmarke, *with other necessarie Rules of common Navigation.*

Translated out of Dutch into English, by *Robert Norman* Hydrographer.

And newly corrected and augmented by E. W. 1612.



Printed at London by *E. A.* for *John Tap* and are to be sold at his Shop vnder S. *Magnus* Church. 1612.

Item, from Garnſay to the Caskets a ſouthweſt moone makes a lowe water.

And 6.or 7.leagues without Garnſay, a ſouthweſt and by weſt Moone makes a lowe water.

Item, betwene Caskets and Portland, a ſouthweſt and by weſt Moone makes a low water: alongſt the Coaſt and 7.or 8.leagues a ſea boord, a weſt ſouthweſt Moone makes a lowe water.

Item, from Bearfleete to the Seinhead, in the faire way, a weſt ſouthweſt Moone makes a lowe water, and when it is a high ſpring, then a weſt and by ſouth Moone makes a lowe water.

Item, from the point of Seine head, to within the Riuer of Seine, a weſt and by ſouth Moone makes a lowe water.

Item, a ſouthweſt Moon makes a lowe water in the riuer of Seine within.

From the Strowter to Some, in the faire way, a ſouth and by weſt Moone makes a lowe water.

Item, at Some in the Foſſe, a Weſt ſouthweſt Moone makes a lowe water, and at Crotate, a weſt ſouthweſt Moone makes a lowe water, and at a weſt Moone it is but little floud.

Item, at Bullein and at Callice, at Graueling, at Dunkerke, Newport, and alongſt all the Coaſt of Flaunders, a weſt moone makes a lowe water.

Walterſland.

Item, from Walterſland to the abbey of the Brothers, a ſouthweſt and by weſt Moone makes a ſtill water. And from thence to Blankenborow, e ſaint Katherins, a ſouthweſt Moone makes a ſtill water. And from Blankenborowe to Saint Katherins, a ſouthweſt Moone makes a ſtill water.

Item, a ſouth Moone makes a high water at Swine.

Now

Of the Hauens alongst the Coastes of Spaine and Portingall.

Item hee that will saile into Ribadewe, hee shall goe in hard by the point on the east side, and then hee shall keepe foorth in the middest of the Riuer, till hee come open of the sandie Baye, and there hee may come to ancker at fiue, seauen, or eight fatham.

And from Ribadewe eight Leagues to the Northwestwards, lyes the sound of Riuetis, and he that will goe into Riuetis with a southwest winde, hee must goe in by a high point on the west side: and then let him keepe on in the middest of the harborough, going in a good way. And then come to an Ancker, where hee shall thinke good, at tenne or twelue fatham.

Item, west northwest from Riuetis, fiue Leagues off, lyes the point of Ortingall, and it is a high land, and without the point there standes fiue or sixe high Rockes, which may bee seene in the Seawards, at the least two kennings of from the land. And those are Clowes, and there is between them and the land 12. fatham.

On the east side of Ortingall is a barred hauen, and that goeth to the towne of Saint Mathewes. And hee that will ride there, let him anker before the Village, called Rarinoo, which lyes beneath the Castle of Ortingall. And that is but a quarter of a league from the Rockes, which lye of the southwards. And hee shall haue the Village North from him.

And Northwest from Ortiger three leagues or more, lyes, the Hauen of Riuero, which is a good harborough: and goeth Southwest in. And the Southside is a lowe point, & he that will goe in there, let him keepe by the south side, for the northside is all Rockie and foule ground. And when he hath sayled a little way in, let him ancker at fiue, seauen, or eight fatham.

Ryes

When you are north northeast from the Cape Prior, about five or six leagues, then doth the Cape shewe as here above is set forth.

Item, the flat end is the southeast end, and the other end is the northwest end, and it lies by the Sea, and it is a high Hill and all ragged aloft. When as you are to the northward, or south westwards from the Cape Prior, & that you are not farre off from it, then is the Cape verie high all alongst, and seemes on the toppe of it, as though there were many men sitting on a rowe, everie one a little way from another: and in the Northside of the Cape lyes two sandie Bayes one by another, and on the north northeast corner of the Cape lies a rowe of lowe Rockes, and in the middest of the rowe lyes a great Rock, like as it were a Sack of Haye. And when you are come within the Cape, then is there lying on the south side of the Cape a sandye Baye, and to the south of the sandye Bay, lyes a lowe flat Hill, which is not halfe so high as the high land that lies within it: and westward from the south end of the flat hil, there lyes two great Rockes hard one by another, and to the southwards of the sandye Baye, lies a point out from the entrie, within which is the Haven of Faroll.

When you will saile into the Haven of Faroll, you shall beare into the sound of the Groyne, so long till you see the Haven of Faroll open on your Starboord side, and then you may beare boldely in within it. And when you are in, then before the towne of Farol, you must goe farther, for within is all shold, the haven lies Northeast in, and it is a good Haven for Carrects which are bound southwards.

He that will saile into the Groune, shall keepe his course from Cape Prior South and by east towards the Groyne, and if he be without the Cape Prior, then let him keep nearest to the East side, for the Westerside is all foule ground.

And

And he that see to the southwards from him about two leagues off or more, a long small tower with a flat head, and dooth not showe verie high above the Sea: and southward from that tower, as you would inage two bowe shotes of, there standes the towne of the Groine: and at the South-east end of the towne standes a Castle, and there is a great foure cornered Tower which hath no covering above to be seene: and to the Eastward from the Castle, about foure ships length from the shore, there lyes a ledge of Rockes, and when it is a full sea, then you shal see but three or foure rocks breake above the water, but when it is a low water, then you shall see a great many. And Southward from the Castle about foure ships length from the land, there lies a little greene Hill, and on that standes a little Church of S. Anthonies, and it seemes as though it were a little flat house, and you must leave the high Tower, the ragged Rockes, with the lowe Rockes, and that greene little hil altogether on your starboord side, and when yee are cleane past that greene hill to the Southwards, goe westwards in before the Towne, untill yee bee cleane defended from the Sea, then ye may anker where you will and in what depth ye list.

Item, Sisarge lies a little to the westwards of the Groine and there is a little Iland, and is plaine on the top, & when you are a little way within the Cape Prior, you may then see betwixt that little Iland and Sisarge, and there is no good Roade under Sisarge, for the ground is not cleane.

Mongis

When you are northwest and by north of Mongis, then it shewes as here above is set forth.

Item, he that will saile into Pongie, and comes from the eastwards, he shall finde without at the east point a great bigg Rocke which is called Millen, and by it stands bigg

Cliffes,

Cliffes, which are sharpe on the top: there stands 3. or 4. of them a good way a sunder from an other, and they lye East south east and west northwest, and alongst north from this point, and to the westwards about foure Cable length of, there lyes a Rocke under water: that hee must leane to the starreboorde side of him, and when hee is past the Rocke, then let him go southwest in: and then when he shall see the Church of our Lady that is to the westwards, then let him saile directlye towards it, and then he may anker before the towne, or betweene the Towne and the Church at 7. or 8. fatham.

Mongy

Item, when you are from Mongie Northy and by West, then it shewes in this sort.

Item, he that will sayle into Mongie, and comes from the westwards, let him keepe the Cape of the Groine without the point which lies there within, which is a great round point, of a Ships length, and it is called Bentrie: going thus till you have opened our Ladies Church, and when ye can see the Church, ye may anker at 12. or 13. fathom in the sound or ye may sayle in before the village to the best roade.

Item, betwixt cape Finister and the point of the Groine, lyes a ledge of Rockes halfe a leagne into the sea wards.

And whosoever will sayle into Mongie, let him take heed of those rockes. And betwixt Finister and the Groine lyes a great sandy Bay: where is good riding with an east wind at 10. or 12. fatham.

cape finister

Item, when you have the Cape of Finister southeast and by east from you or there abouts, and are distant from it a-

bout

bout fiue leagues or maze, then it seemeth to be as is figured before.

Item he that will ride vnder Cape Finister, let him saile two Cable length off from the Cape, and goe so on a good League till ye see our Ladies Church, and then let him anker against the Church at 10. or 12. fath. but when hee hath the Cape well from him, there is no good roade for a south winde, for the ground there is soule and rockie all about.

Item, halfe a league to the southwards of Cape Finister, lyes a good hauen for ships that are bound southward which is called Seche, and lyes eastwards from the Cape: to goe into that hauen, you must saile in on the North side, but you may not come very nie the North land, for it is not all cleare of Rocks nie the shore. And when you come nye the hauen, there lyes a blacke Rocke not much aboue the water, which you must leaue on the sterboord side and saile in about the middest, betweene the rock & a points that lies towards Cape Finister, going so a good way into the northwards, keeping you in the middle of the sound, till you see a sandy Baye to the Sterebooard side of you, and against that sandy Baye, you may anker at 10. 11 or 12. fathom: and if you goe further in it is shallower.

Foure leagues from Cape Finister, to the southeast wards, lyes the point of Mounteluer, and in the course thether lye many rockes on both sides, and the most part of the rockes that may hurt you, are in sight. Mounteluer is a great round hill, and there is a little tower on the top of it, and that is the north point of the Moores.

Hee that will saile into the hauen of Moores, he must first bring the middle of the Mounteluer right ouer a little bally, and when he comes before the Hauen, then let him run in east northeast towards Mounteluer, and when hee is against Mounteluer, hee shall then see another high point lying on the Larboord side of him, & then he shall saile of fro Mounteluer in towards the other point, and then hee shall see the Towne to the Westwards before him, and then let

him saile in before the Towne, till yee come to twelue or fifteene fatham, and there anker.

Yee that will saile into Pontasedre, bee must saile in by the Iland called Bleedednes which is a flat land.

Then hee shall keepe the south side, going East northeast two leagues, and then hee shall finde before the middest of the hauen a little Iland, he shall leaue that on his Larboord side, and to the southward of the Iland, hee shall see a great Tower: then let him saile directly before the tower, and there come to an anker, at fiue, seauen or eight fatham. And hee will ride vnder that Iland, which lies before the middle of the hauen, let him bring the Iland to the westwards of him and so anchor at 7. or 8. fatham.

Yee that will goe in to ride vnder the Ilands of Bayon, let him keepe neere to the Iland: for at the northeast point of the Iland, there lyes a rocke vnder water, about a cable length from the point, otherwise all is cleare.

He that comes out of the sea with the Ilands of Bayon he shal not perceaue any other land but Graye Cliffes, and he that will saile in there comming from the south, let him leaue the rocks which are in the south side of the Iland betweene him and the Iland, and so saile in by the middlemoste Iland, wherein the Eremetage stands Ouer against the great sandye Baye, there is the best roade in twelue or fourteene fatham, and you may ride so nigh, till you haue brought that northend of the Iland directly with that land which lies to the northwards of the Iland.

Yee that will saile into Bayon, let him saile in betwéene the little Iland of Baiona, that lieth on the north side of the entrie and the towne, going in East and by north, till he bee as farre within as the lowe towne, which he shal see on the south side, and there he may anker at ten or twelue fatham: but he must take great heede of a ledge of rockes that lie off the Iland on the north side.

Item, there lye fiue or sixe rockes by the point or corner of the Caps Salalis, these he must leaue on the starebord side:

and

and he needes not come to ancker, before he se them that in the other point that the high towne stands on.

Item 19. Leagues to the southwards of this Iland of Fayona, lies the riuer of Portugall.

Item the riuer of the port of Portugall, is a good hard hauen, and hee that will goe in there, must keep the south side neerest him. And let him take good heede of the Rockes which lie at the entring into the hauen, and that is but a shorte cut in. The south side is a lower land then the north side is.

Item, eleuen leagues to the southwards of the port of Portugall, lies the hauen Aueiro.

Item, the Hauen of Aueiro is a hard hauen, & the land by the water side is a lowe sandy land: To saile into this Hauen, you must take your markes vpon the south land, and those are three Beacons of markes: those three Beacons must be kept in one, so long till you bee come almoste hard by them, then you must set of northwards from them towards the other Shingle, which lies in the North side of the Hauen, and there yee may ancker at seauen or eight fatham.

Item, seauen leagues by south that hauen, there lyes the point of Mellacke by Nouego, which is a faire foreland, and from the south point of Mellacke, a mile to the east, southeastwards, there lies Nondego, which is a hard hauen.

And westward from that hauen a quarter of a league from the land lies a bancke of seauen fatham, & behinde that one may ride in 12. or 13. Fatham, it is there good grounde and faire, and there is a village there by North Northeast from the roade.

He that will ancker vnder the Burlings, let him ancker before the Eremitage at ten Fatham, hee may come to it by which side he will, for it is cleare there of danger.

Twelue Leagues to the S. southeast of the Burlinges, there lies the Cape of Rockfemper, a little within that point is the Roade of Kaskales & he that will ride there may

anker where hee liſt, for there is good anker holde in euerie place, but no couert for a ſouthweſt winde.

When a league Eaſtwards from the Raſkals of ſaint Gilians point, is the north point of the Riuer of Liſbone, and hee that will ſaile in by the Northland, hee muſte keepe the middle, and ſaple in betwixt the point of ſaint Gillians, and the land of the Bachopes, till he be within the point of ſaint Gillians, and then let him ſaile on ſouth by the Northland till hee come to ſaint Katherins Bay, and then he muſt keepe off againe from thence towards the S. land, for feare of the Rockes which lye by the Raſtelles a bow ſhoote from the northland, and that rocke is at a lowe water in ſight, and at halfe flood it is vnder water.

The firſt white Church is Saint Katherins Churche, which ſtandeth vppon the foreland of ſaint Gillians to the Eaſtwards by the water ſide, and the other Church is the Raſtelles: and ſoutheaſt from thence in twelue Fatham, is a good roade for all windes.

He that will ſaile in vp the great deepe of Liſbone comming from the ſouthwards, let him leaue the ſand of the Bachopes on his Larboord ſide, and all the other ſands that breake on his Sterboord ſide, and then he ſhall ſee the white ſandy Baye that lyes next to the Eaſtwards of the point of Saint Gillians, and keepe that Northeaſt and by north of him, going ſtill alongſt the Bachopes in 6. or 7. fatham and by theſe markes he may ſaile into the Bay of ſaint Katherins, and then let him keepe two third partes of the riuer on his Larboord ſide, and the other third part on the Sterboord, and ſaile on ſo vntill he come before the towne of Liſbone, and he that will ancker before the Coupers, let him ancker before the Lime Kil and more a thwart the Riuer, and lay the one anker at 13. fatham, and the other at 4. fatham.

He that will ſaile in before the Fiſher town, let him not come neere the ſhore before the Coupers gate, for there lies a rocke a pretty way off, and it is il riding there about in any place, becauſe the ſtreames turns about ſo there at the eb

and

and it is all rockie.

Item, within a stones cast to the southwards of the Rachopes, is 8. fatham deepe, and by the same sand by the south side, it is 13. fatham deepe within a Ships length of the sand. And let him that will saile out at Saint Gillians deepe, take good heede of the ebbe, for that sets sore towards the sand of Rachopes.

Item, hee that will saile in by the great deepe of Lisbone, let him bring the Castle of the Rastelles, east and by north of him, or let him bring the tower of the Rastelles to the northwards of the souther foreland, keeping them so till he haue brought the little Church at S. Gilians point North northeast, or there about from him, then goe northeast off it towards S. Katherins bay: and alwaies reckon your tides well.

He that will saile to S Toous, hee must haue halfe flood with him, and must saile east from Cape Pitcher, then hee shall see before him to the northwards, a great high land, when he is past that high land, then let him keepe the point of Cape Pitcher open a good way without the high land, going with those markes till he see the Tower to the northwards of him, then let him saile right with the Tower, till he come neere to it. And when he is as farre in as the Tower, then let him edge into the middle of the channell, and anker at ten fatham.

Item, when you are off from Cape S. Vincent West or thereabout, then dooth it shew as is aboue figured.

He that will ride vnder Cape S. Vincent, shal passe on by the first point, and saile a League further in vnder the other point by a red land, and there ancker at 15. or 20. Fatham, for the ground is all cleane thereabouts, and ye may